

**THE WITNESS:** There is one question on 19044 that carries over there on the same subject.

[19976] **TRIAL EXAMINER:** All right.

**By MR. GOLDBERG:**

**Q.** During what month was backfeed used for the 220 kv lines a maximum in 1946? **A.** During the months of low flow and of maximum load on the interconnected system.

**Q.** During what months is there maximum use of the 220 kv lines for send-out from Safe Harbor to Baltimore? **A.** During the months of high river flow.

**Q.** Did these facts enter into your allocation of the 220 kv lines? **A.** Yes.

**Q.** At transcript pages 19,045 and 19,046, you testified that the Ellicott City-Takoma line is used for interchange purposes between Baltimore and PEPCO and for the purpose of supplying firm energy from Baltimore Company to PEPCO.

**Are those the only uses of that line?** **A.** No, they are not.

**Q.** What other use is made of that line? **A.** That line is used also for backfeed to Holtwood Company.

**Q.** Does that mean a portion of the backfeed from Baltimore to Safe Harbor comes over the Ellicott City-Takoma line? **A.** Yes, that is where part of it does come from.

[19977] **Q.** On page 19,067, line 9 you stated you treated the amount of firm energy billed to Metropolitan Edison Company as though it were actually the metered amount at Violet Hill. Did you mean when you so testified that firm energy was metered separately from interchange energy to M. E. Company at that point? **A.** No, the meter measures the total quantity received at that point without distinction and the interchange to M. E. Company, after adjustment for the portion delivered to Pennsylvania Power and Light Company through Metropolitan Edison Company, is that portion of the total in excess of the firm energy

as computed according to the terms of the contract, which is Exhibit No. 72.

Q. Is that what you had in mind in making your answer at transcript 19,066, line 20: Namely, that the meters do not distinguish the quantities registered as between firm and net interchange? A. Yes, that is right.

Q. Referring you to transcript 19,070, the question beginning at line 2, what did you understand Mr. Myse was referring to when he said "total resources"? A. Total energy resources, which was what we had been discussing at that time.

Q. And did you make your answer which appears on lines 5 to 7 of that transcript page 19,070 on that basis? [19978] A. Yes.

Q. At transcript 19,135 you were questioned by Mr. Myse regarding your use of 2 per cent in connection with operation of single phase equipment at Safe Harbor for railroad service.

Have you since your cross-examination checked the available data in connection with your use of 2 per cent? A. Yes, I have.

Q. What have you found? A. I have found that operating and maintenance expense applicable to water wheels, turbines, generators and accessory electrical equipment as reported by Safe Harbor for 1946, including an allocation of general and administrative expense, is approximately 2.2 per cent of investment in those facilities.

Q. At 19,215, line 21, you state in effect that there were two outlets for 25-cycle generation at Holtwood, namely to Lancaster and to Baltimore Company at Highlandtown. Is it not true that a part of the 25-cycle output at Holtwood can be transferred to Holtwood's 50-cycle system through the two frequency changers at Holtwood?

THE WITNESS: Yes, that is true.

[19980] Q. Referring you to transcript 19,233, lines 7 to 11, and your answer at line 12 of that page and considering Mr. [19981] Myse's definition of received at transcript 19,238, line 25, is the amount of 538,171,000 kwh the amount of energy actually received by Penn Water from Safe Harbor in 1946?

MR. MYSE: Now, I object to that question as not being proper rebuttal, because again I point out that the definition given on page 19,238 has no connection whatsoever with the testimony at page 19,233 which this question purports to examine anew.

TRIAL EXAMINER: The objection is overruled.

THE WITNESS: No, that is not the actual amount of energy delivered by Safe Harbor to Holtwood's facilities.

By MR. GOLDBERG:

Q. Why not? A. Because the total amount of Safe Harbor's output is delivered to Holtwood's facilities. In 1946 this amount was 876,968,000 kilowatt-hours.

Q. At transcript 19,201, line 24, to transcript 19,203, [19982] line 11, you were asked concerning the allocation of total hydro power cost to capacity and energy components, and you agreed that if 100 per cent of the installed capacity were dependable capacity, then by your method you would allocate 100 per cent of the hydro costs to the capacity components.

Did the type of contract known as H and I in this proceeding influence you in making the allocation to capacity and energy components as you did? A. Yes, it did. Consideration was first given to the net revenue to determine what, if any, part of it was a function of energy sales which would constitute a proper basis for allocating a portion of the costs including return, depreciation and income taxes to the energy component.

Examination of the contracts under which Holtwood operates revealed that the net revenues are independent of the amount of energy sold. In view of this condition, it appears that the hydro costs should be allocated to the capacity component in proportion to the dependable capacity of the hydro plants, which is the method which I have used.

Q. Do the same considerations which determined your method of allocating hydro costs also apply to the allocation of the fixed costs of steam generation to the capacity components? A. Yes, they do.

[19983] Q. Are these considerations responsible for the unit capacity costs developed in your studies? A. Yes, because these unit capacity costs are the direct result of a contract condition.

Q. Beginning at transcript page 19,110 to page 19,124, you were asked about your allocation of intangible and general plant, which in your study you assigned to the pool. Why did you assign this general and intangible plant to the pool? A. This was considered a jointly used property, and was therefore allocated from the pool on the basis of use.

Q. What other method could you have used in allocating general and intangible plant? A. Well, this property could have been allocated directly to transmission and production plant.

Q. Would this same method apply to general and administrative expenses? A. Yes, that could have been treated the same way.

Q. At transcript 19,098 you were asked concerning the total hydro operating cost as shown in the last column of Table III, Exhibit 421, which represents the total cost of hydro operating after deducting the \$133,750 which Holtwood receives for allowing backwater from the Conowingo plant to reduce the head at its plant.

Could you have treated this payment in any other way? [19984] A. Yes. The hydro costs could have been assigned to the pool without the deduction, and the deduction could



have been made in Table V after administrative and general expense had been allocated to the individual customers and the pool.

. . .

[19988] Q. Mr. Davis; at transcript 19,098, you were asked whether the amount \$269,145 appearing in line 1 of Table III of Exhibit 421 shows the total costs of service as you or the Commission accountants found them; is that right? A. That is right.

Q. And is your answer to the question based upon the treatment you accorded the \$133,750? A. Yes.

Q. And did you at transcript 19,099 testify that there seemed to be no satisfactory way of handling the \$133,750 except to say that Penn Water had a cost net of only \$269,000? A. That is right.

Q. Now, then, have you considered whether the \$133,750 could have been treated in any way other than the manner in which you treated it in Exhibit 421? A. Yes, I had in mind another way. I had in mind another way at that time.

. . .

[19989] Q. When you say you had in mind another way at that time, what does "at that time" refer to? A. At the time when I set up the allocation as is shown in Exhibit 421.

Q. Now, did you consider that the hydro costs could have been assigned to the pool without the deduction, and the deduction could have been made in Table V after administrative and general expense had been allocated to the individual customers and to the pool?

. . .

THE WITNESS: Yes, I did consider that as an alternative method, and considered what effect it might have on the answer.

By MR. GOLDBERG:

Q. What would have been the effect on the results of your study if you had treated this backwater payment in that way?

[19990] THE WITNESS: It would have increased the total cost allocated from the pool by a small amount of administrative and general expense which would have been allocated to the \$133,750, and it would have decreased the costs assigned to individual customers.

It would also have increased the proportion of administration and general expense allocated to hydro costs in the pool. The effect on the final result would have been small. I have not attempted to determine the effect of this change separately from that of transferring intangible and general plant from the pool to direct allocation in Table I, and of similarly transferring administrative and general expense in Table III.

By MR. GOLDBERG:

Q. Well, what would have been the effect on the results of your study had you adopted the method of direct allocation of intangible and general plant, administrative and general expense and had used the total hydro costs in Table III and the first part of Table V?

THE WITNESS: All three of these alternative methods cumulatively would have increased the total cost allocated to Baltimore by about \$76,000 and decreased the costs allocated to [19991] Pennsylvania customers in the same total amount.

Q. At transcript, 19,186, lines 5 to 10, you were asked this: "If the actual Pennsylvania Railroad load in Pennsylvania at the time of the area 6 system peak had actually been 36,557 kilowatts, would not the load shown in Exhibit 425 have been higher by 12,557 kilowatts on that peak

hour," and at transcript page 19,187, lines 14 to 19, you were asked if it [19992] would not be correct to say that if you had used that higher peak load at the time of area 6 system peak in determining your dependable capacity, you would have come out with a higher figure for dependable capacity.

You replied that that was correct if it had been determined that way. Was it determined that way? A. No, sir.

Q. How was it determined in so far as the railroad load entered into your determination? A. My determination was based on a consideration of the total area 6 peak load which included the combined railroad load in Maryland and Pennsylvania. Using 36,557 kilowatts for the load in Pennsylvania alone would not alter the total railroad load and therefore would not affect the result of my determination of dependable capacity.

Q. At transcript page 19,294, in reply to a question beginning at line 16 and ending at line 21, you stated at lines 22 to 24 at that same page that more backfeed or diversion would be required assuming all other conditions remaining the same, if interchange energy supplied to the Pennsylvania customers were increased.

Would not backfeed and diversion of Baltimore Company's two-thirds from Safe Harbor be increased assuming all other conditions remaining the same, if Penn Water's sale of firm energy to its Pennsylvania customers increased?

[19997] THE WITNESS: Yes, the same thing would be true if firm power sales increased as if interchange sales increased all other conditions remaining the same.

By Mr. GOLDBERG:

Q. Would not backfeed and diversion of Baltimore's two-thirds from Safe Harbor also increase, assuming all other conditions remaining the same, if the river flow at

Safe Harbor and Holtwood was lower than experienced in 1946? A. Surely.

[19999] Q. Mr. Davis, referring you to transcript 19,325, Mr. Myse put this question to you at line 13: "Now, which of the two figures \$103,690 or \$94,037 is the correct [20000] amount of the cost to be allocated to the Pennsylvania Railroad in Pennsylvania for special facilities"—implying that there was some inconsistency between the two amounts.

Is there an inconsistency between the two amounts in your use of them? A. No, one is costs allocated; the other is charges made to the railroad company.

Q. Will you explain why there is a difference between the \$94,038 and the \$103,600? A. The \$94,038 is the total special facility cost allocated to the railroad in Pennsylvania and the \$103,690 is the proportionate amount of the facility charges corresponding to the \$94,038 of allocated cost and is used as the basis of adjusting the revenue collected by Holtwood from the Pennsylvania Railroad to conform to the allocation of cost.

[20005]

STANLEY W. ROLAND.

FURTHER RE-DIRECT EXAMINATION.

By Mr. GOLDBERG:

Q. I show you your testimony at 19449 and call your attention to your answer at line 17 where you say, "My answer [20006] at that point is wrong."

That answer that you make followed what is referred to by the reporter as "question and answer read." I wonder if you can tell us what you were referring to when you said "My answer at that point is wrong" in the previous testimony you were referring to. A. I had reference to the answer at 19447, line 10; also the answer at 19447, line



17, and also on the same page at line 21. In each case the deliveries at Westport, Riverside, Takoma Park and at Conowingo and at Perryville are in part energy purchased by Baltimore Company from Safe Harbor at Safe Harbor and delivered by Holtwood to the Baltimore Company.

. . .

[20010] TRIAL EXAMINER: Very well. On page 19461, lines 21 to 23, Respondents' counsel attempted to put a question to the [20011] witness which was ruled out by the Examiner at 19466, lines 3 and 4.

In consulting the transcript I find that most of the testimony in evidence that I thought would support a finding that this particular question was repetitious, went to the matter of what the contracts provided, and I have not yet been able to find in the transcript that there has been any testimony directly on the point of whether Baltimore Company rendered a bill to the railroad covering only the so-called sale to the Railroad in Maryland, as a matter of practice. You may put that question to the witness if you wish.

MR. MYSE: Well, may we have an answer to the question, then, as put on page 19461, lines 21 to 23, as follows: "Does Baltimore Company render a bill to the Railroad covering only the so-called sales to the Railroad in Maryland?"

THE WITNESS: No, the bill covers sales by Baltimore Company in Maryland and Holtwood Co. in Pennsylvania. There is one bill.

By MR. MYSE:

Q. Is there anything in the bill where it says anything about sales by Holtwood and Baltimore in both Pennsylvania and Maryland?

. . .

[20012] THE WITNESS: I do not believe it does.

By MR. MYSE:

Q. As a matter of fact, this bill covered sales by "Electric Companies," is not that right?

THE WITNESS: If it is stated as it is in the contract, that is what it would state, but I have not seen the bill or I do not recall having seen it recently enough to recall whether or not it includes what was just stated.

[20014]

JOHN M. NEWLANDS.

FURTHER RE-DIRECT EXAMINATION.

By MR. GOLDBERG:

Q. You are the same Mr. Newlands who has previously appeared and been sworn? A. Yes, sir.

Q. Do you have Exhibit 421 before you? A. Yes, sir.

Q. Can you take Exhibit 421 and referring to each of the tables indicate the figures you supplied to Mr. Davis?

[20016] THE WITNESS: Yes, I can do so.

By MR. GOLDBERG:

Q. Will you do so, please? A. On Table I of Exhibit 421 I supplied all the figures in column 7, with the exception of the 100 per cent at the end.

MR. MYSE: Just so we understand what you mean by column 7, it is the column headed, "Total Service," right?

THE WITNESS: Yes, sir.

MR. MYSE: With what exception?

THE WITNESS: The percentage figure at the end. On Table II, I supplied all the figures in the Total Service

column, Column 7 and the basic figures by lines from which Item 2, "Depreciation Reserve," was calculated.

I supplied depreciation reserve figures by lines. Mr. Davis took those figures and accumulated them by companies and made an allocation of the reserve applicable to general property to those companies.

[20017] THE WITNESS: On Table III I supplied the basic figures for operating expenses taken from the company's books from which the figures in the Total Service column, Column 7 were derived.

[20018] TRIAL EXAMINER: In other words, you supplied everything in the "Total Service" column?

THE WITNESS: Yes, the underlying figures. Mr. Davis has made combinations to arrive at these figures here. On Table IV I supplied the basic figures from which Item 4 "Depreciation Expense" was calculated by Mr. Davis. In other words, there again I supplied the depreciation by lines and he accumulated them and allocated the general depreciation by companies.

[20019] THE WITNESS: The figures in Column 7 of "Total Service" of Table IV check directly or can be derived from exhibits that [20020] are already in the record, Mr. Dunn's Exhibits 392 and 393.

On Table V I supplied the basic figures for line 7 "Depreciation Reserve" and there again Mr. Davis made an allocation of the general depreciation and added it to my basic figures to arrive at the figures on this schedule. I also supplied the figures shown at line 18 "Depreciation Expense" and Mr. Davis made the same allocation.

By MR. GOLDBERG:

Q. Referring to Exhibit 422, can you point out, by going through the tables, the figures you supplied to Mr. Davis? A. Well, they are similar figures to those that

I explained or just illustrated in Exhibit 421. Do you want me to go through this exhibit?

Q. No, I think that answer is sufficient.

[2005]

R. L. THOMAS.

DIRECT EXAMINATION (in Rebuttal).

By MR. REIBLICH:

[20064] Q. How have the parties construed the two-thirds and one-third apportionment since the Safe Harbor plant went into commercial operation in 1932? A. Until after the beginning of these hearings, the three parties (i. e., the Baltimore, Holtwood and Safe Harbor Companies) have all considered and have repeatedly and consistently stated that the Baltimore Company purchases two-thirds, and Holtwood Company one-third, of the Safe Harbor output, and conversely that Safe Harbor Company makes these sales.

Q. Was this true after, as well as before, Safe Harbor Company became a party to the Pennsylvania Railroad, Lancaster, Coatesville and York contracts? [20065] A. Yes, it was. The signing of these contracts by Safe Harbor Company made no difference in the situation. Both before and after Safe Harbor Company became a party to them Holtwood Company has sold the electrical energy to the customers at Lancaster, Coatesville and York, and has collected and retained the charges. The amounts of these charges became deductions in computing Holtwood Company's bill to Baltimore Company as provided in Article III of the 1931 agreement between Holtwood and Baltimore Companies. Likewise Holtwood Company has made the sales to the Pennsylvania Railroad in Pennsylvania.



[20070] Q. Was this idea of avoiding double taxation by the direct sale of energy by Safe Harbor Company to the Pennsylvania customers ever carried out? A. No, it was not. The fact is that it was decided not to attempt to avoid double taxation, as I shall explain later. From the beginning of commercial operation until [20071] the end of 1942, Safe Harbor Co. paid to the State of Pennsylvania the gross receipts tax on every dollar of revenue received from the sale of one-third of its output to Holtwood Co. and Holtwood Co. paid the gross receipts tax on the entire amounts paid by the Pennsylvania customers and by the Pennsylvania Railroad for power and energy delivered in Pennsylvania, with the single exception of the year 1932 in which Holtwood Company claimed certain exemptions. Effective January 1, 1943, an amendment to the Pennsylvania Gross Receipts Tax Law exempted from taxation

“gross receipts derived from sale for resale of electric energy to persons, partnerships, associations, corporations or political subdivisions subject to the tax imposed by this act upon gross receipts derived from such resale . . .” (Pennsylvania Act of May 21, 1943, P. L. 334.)

Nevertheless, Safe Harbor Company was still required to pay the gross receipts tax on revenue from that portion of Holtwood Company's one-third share of Safe Harbor's output which was calculated to be resold by Holtwood Co. to Pennsylvania customers other than the Pennsylvania Railroad, since Holtwood Co. did not pay the tax on such sales, and Holtwood Co. has paid the tax on the Pennsylvania portion of revenues received from the Pennsylvania Railroad.

[20072] Q. Can you explain what happened with reference to the inter-company consideration of whether Safe Harbor should sell directly, or jointly with Holtwood, to the Pennsylvania customers. A. Yes, I can. The method of ac-

counting for energy and the decision that Safe Harbor Company would continue to sell its entire output to the Baltimore and Holtwood Companies were the result of joint study of the question over a period of years and of mutual agreement by Baltimore Company and Holtwood Company. When the Pennsylvania Railroad began the work of electrifying its lines in Pennsylvania the question of whether Safe Harbor Company should sell directly or jointly with Holtwood Company the supply to the Railroad in Pennsylvania was taken up specifically by Holtwood and Baltimore Companies as set forth in a memorandum dated March 3, 1937, by the Operating Committee provided for in the contracts between the Holtwood and Baltimore Companies and between the Safe Harbor, Holtwood and Baltimore Companies. It had not been necessary to decide the question prior to that time as [20073] all of the energy for the Pennsylvania Railroad electrification was delivered either in Maryland or the District of Columbia for the electrification of the main railroad line from Perryville, Maryland, to Washington, D. C., and was recognized as a sale by Baltimore Co. alone.

Q. Is this the memorandum to which you refer? A. It is.

MR. REIBLICH: I ask to have this marked Exhibit 470.

(Exhibit No. 470 is marked for Identification.)

By MR. REIBLICH:

Q. What conclusion was reached by the Operating Committee? A. This memorandum reveals that the idea of joint sale by Holtwood and Safe Harbor Companies to the Railroad in Pennsylvania was rejected by the Committee as too complicated. After considering the respective merits of sale directly by Safe Harbor Company or directly by Holtwood Company, the Operating Committee recommended that Holtwood Company should sell directly to the Pennsylvania Railroad all of the latter's requirements de-

livered under this contract in the State of Pennsylvania. In considering these plans, the Operating Committee referred to the proposed direct sale by Holtwood Company as being treated in "exactly the same manner as sales to Lancaster, York and Coatesville." The recommendations of the Operating Committee were approved by Mr. Walls, [20074] President of the Holtwood Co., and Mr. Wagner, President of the Baltimore Co. by an exchange of letters dated September 9, 1937, which letters have been introduced into evidence by the Holtwood Company in this case and have been identified as Exhibit No. 11.

Although the Operating Committee's memorandum was written primarily in connection with the Pennsylvania Railroad electrification, it also discusses the treatment of sales to other customers in Pennsylvania, pointing out that substantial savings in gross receipts taxes in Pennsylvania could be effected if the Safe Harbor Company made direct sales to the Pennsylvania Railroad and the other Pennsylvania customers. However, the Operating Committee said on page 5 of their memorandum: "Nevertheless the tax saving (equal in amount to the gross receipts tax on one-third of the revenue received from the Pennsylvania customers) has never been considered sufficient to justify contractual changes and complications resulting from direct sale by Safe Harbor Company."

[20076] Q. Prior to these hearings, have the sales of electric energy by Holtwood Company to its Pennsylvania customers ever been considered as joint sales by Holtwood Company and Safe Harbor Company? A. No, the sales have never been considered as joint sales, but recognition has been given to the fact that the energy for these sales comes from an integrated system consisting of the resources of the Baltimore, Holtwood and Safe Harbor Companies. Such recognition is found in the fuel rate adjustment clauses of the Pennsylvania Railroad and Coatesville [20077] contracts.

The fuel rate adjustment formula for the Pennsylvania Railroad is specified in the original 1931 Agreement with that Company, but the formula for the Coatesville contract was not developed until 1944. Both formulae are based on the premise that the energy supply includes the generation of the Holtwood and Safe Harbor Hydro Plants and of the Baltimore and Holtwood Steam Plants and adjust for the increased cost of coal in Baltimore in the proportion that the Baltimore and Holtwood steam generation bears to the total generation of the Holtwood, Baltimore and Safe Harbor Companies. (In the Coatesville contract allowance is also made for certain interchange operations.)

Q. If Safe Harbor Company had not been made a party to the contracts with Holtwood Company's Pennsylvania customers, would the accounting and operations of the Safe Harbor, Holtwood and Baltimore Companies have been any different than they have been? A. They would not. If Safe Harbor had not been named as a party to any of the Pennsylvania contracts, including the Pennsylvania Railroad, no change would have been necessary in any operations, statistical or accounting records, or sales reported to public agencies; and the revenue received, expenses, taxes paid and net income of all three parties would remain unchanged.

[20078] For example, in the initial drafts of the 1946 contract with the Metropolitan Edison Company as submitted to Baltimore Company by Holtwood Company, it was proposed that Safe Harbor Company should continue to be a party as in the preceding 1935 agreement. When Baltimore Company questioned whether taxes had been saved through Safe Harbor Company's being a party to the existing contract and pointed out that no power and energy was actually sold by Safe Harbor Company to Metropolitan Edison Company, Holtwood Company agreed to the omission of Safe Harbor Company as a party to the renewal contract. This omission has caused no changes



in operation, accounting or billing. The accounting and reports of the three power companies have been consistently on the basis that Safe Harbor disposes of its entire output to Baltimore and Holtwood Companies.

Q. Will you please explain this? A. In 1932, when the Safe Harbor plant began commercial operation, it became necessary for the Baltimore, Holtwood and Safe Harbor Companies to agree on a method of accounting for energy sales and purchases even though this determination did not affect the inter-company billings. In 1932 the Operating Committee worked out and adopted a form, identified in this case as Exhibit No. 143, for the monthly determination of energy sales. This form, entitled "Energy Purchased by Baltimore and Holtwood Companies from Safe Harbor Company and [20079] Energy Purchased by Baltimore Company from Holtwood Company" has been used by all three companies from July 1932 to October, 1946. Every month from July 1932 to October, 1946, the form has been made out by Holtwood Company and sent to Baltimore Company. All three companies have used these statistical reports, or the data therein, in reporting energy purchases and sales to the Federal Power Commission, the Public Service Commission of Maryland and the Public Utility Commission of Pennsylvania.

[20080] Q. Mr. Thomas, I show you a tabulation showing the annual kwh figures for 1944, 1945 and 1946. Is this the same form you just referred to? A. Yes, it is. The form itself, and the figures typed thereon for 1944 and 1945, were made up by Holtwood Company and sent to Baltimore Company. The figures for 1946 were entered on the form in ink by Baltimore Company. Holtwood Company has not yet issued this report for 1946.

MR. REIBLICH: May I have the document handed to the reporter marked for identification as Exhibit 471?

TRIAL EXAMINER: The document handed to the reporter may be marked Exhibit 471 for Identification.  
(Exhibit 471 was marked for Identification.)

By MR. REIBLICH:

Q. Do you wish to comment on this form? A. Yes. One of the items on this form (No. 20) which was needed and has been used for reports to the regulatory authorities is captioned "Energy Purchased by Baltimore Company from Safe Harbor Company." It is computed as two-thirds of the Safe Harbor net metered kwh sendout less a computed allowance for line losses. The companion item (No. 21) is captioned "Energy Purchased by Holtwood Company from Safe Harbor Company." It is computed as one-third of the net metered kwh sendout at Safe Harbor.

When Safe Harbor Company became a party to Holtwood [20081] Company's contracts with the Pennsylvania customers no change was made in Items 20 and 21 of the form, or elsewhere.

. . .

[20094] Q. Mr. Thomas; at transcript page 908 Mr. Roland identified as Exhibit No. 37 a transmission map of Holtwood [20095] Company, No. 130463, which was filed with Holtwood Company's Form 12 report to the Federal Power Commission for 1944. What does the symbol designation on this map at Perryville and Conowingo, Maryland, show? A. At Perryville and Conowingo there appears a symbol "W-1" which is identified in the legend as "Point of Delivery for Account of Consolidated Gas Electric Light and Power Company of Baltimore."

Q. Mr. Spaulding has introduced a revision of Map No. 130463 dated January 15, 1945, identified in this case as Exhibit 353. What designation is shown at Perryville and Conowingo on this map? A. The symbol "V," shown on the revised map at Perryville and Conowingo, is identified in the legend as "Interconnection with The Pennsylvania Railroad Company."

Q. In testimony regarding the revised map Mr. Spaulding testified as follows (transcript page 16588, lines 21 through 24):

"Q. (By Mr. Sparks) Was such designation as shown on Exhibit 37 a misstatement of the facts?

"A. Not in all instances, but it was an oversimplified representation."

Do you agree with the changes made on the map and with Mr. Spaulding's reasons for changing the designations on the map? [20096] A. No, I do not. Perryville and Conowingo are points of delivery of electric energy by Holtwood Company to Baltimore Company, that is, Holtwood Company physically delivers energy to the Railroad for the account of Baltimore Company.

[20102] Q. In Exhibit 319, page 4, Mr. Zinder has made the following statements:

"Furthermore, the joint nature of many of the operations serves to very closely knit Penn Water into the whole interconnected system. Lifting Penn Water out of this position and treating it as a self-contained whole, while contrary to its manner of operation, is possible in connection with the determination of Penn Water's cost of service to Baltimore Company.

"\* \* \* A review of the facilities of Penn Water reveals that while the operations involved over the facilities may be very complex, particularly contractually, the actual purpose and use of the facilities is comparatively simple with reference to the services to Baltimore."

Do you agree with these statements? A. No, I do not. Holtwood Company cannot be treated as a "self-contained whole" in connection with any allocation of cost of service to any of its customers, and "the actual purpose and use of the facilities" is not "comparatively simple" with reference to the services to Baltimore. I particularly take exception to Mr. Zinder's attempt to "lift out" from the rest of the system Holtwood Company's 25-cycle facilities.

Q. Will you explain briefly your reasons for this answer?

[20103] A. . . . Holtwood Company is dependent upon the transmission lines from Holtwood and Safe Harbor to Baltimore not only to dispose of its energy during high river flow, but to receive energy during periods of low flow. All of these transmission lines are two-way streets. Furthermore, energy flows from Holtwood to Baltimore on the 25-cycle transmission lines at the same time that 60-cycle energy is flowing back from Baltimore Company to Holtwood Company or its Pennsylvania customers by way of the transmission lines connecting Baltimore with Safe Harbor. The system is operated like a single system to obtain maximum overall economy. Energy originating at the plants of the several companies is commingled and is allowed to flow around the various loops and over the various transmission lines in accordance with the requirements of system characteristics and operating economy. One of the objectives of the 1931 inter-company contracts (Items E and H in this proceeding), was to avoid the necessity of identifying the kilowatt hours flowing around the various loops and over the various transmission lines and of segregating them for billing purposes.

[20105] Q. In Exhibit 319, pages 13 and 14, Mr. Zinder allocates 92% of the investment in Holtwood 25-cycle generating plant and substation to Baltimore Company. Do you agree that such allocation is reasonable? A. No, I do not. An analysis of the use that is made of the 25-cycle power generated at Holtwood shows that in any allocation the generating plant, frequency changers and 25-cycle substation should be charged to the pool, as they are used in connection with pool operations for the benefit of all customers.

Q. Have you had charts prepared to illustrate in particular the use that is made of the 25-cycle Holtwood output? A. Yes.



[20106] Q. Are these the charts to which you refer? A. Yes.

MR. REIBLICH: I offer these documents, Mr. Examiner, and ask that they be marked for Identification.

TRIAL EXAMINER: The documents are marked Exhibit 472 for Identification.

(The documents referred to above were marked Exhibit 472 for Identification.)

By MR. REIBLICH:

Q. These charts cover the week of September 16 through September 22, 1946. Will you please explain why you chose that week? A. There are several reasons:

(1) That week has already been referred to in the cross-examination of Mr. Spaulding at transcript p. 3628; (2) this week illustrates operation during fairly low river flow, although the flow was still more than three times the minimum; (3) this week's operation demonstrates the fact that Holtwood 25-cycle energy is indirectly supplied to 60-cycle Pennsylvania customers at other than high flow, contrary to what was implied by Mr. Myse's questions and Mr. Davis' answers at transcript p. 11,932; (4) this week's operation illustrates well the various ways in which Holtwood 25-cycle capacity is used for the Pennsylvania load.

Q. Will you please describe this exhibit? A. First I should like to say that the ordinates are [20107] in units of thousands of kilowatts and each small division represents 5,000 kw. Each small division on the horizontal scale represents an hour and 24 hours are shown for each day of the week. Certain hours are shaded red, green and blue for easy reference. The actual daily flow for each of the seven days is shown under the day and date. Sheet No. 1 and Sheet No. 2 of the exhibit graphically illustrate how Holtwood's 25-cycle capacity is used. Sheet No. 3 shows energy flow on individual lines and other data that are useful in explaining the disposition of the energy.

Q. Starting with curve 1 on Sheet No. 1 and working up, will you please explain each curve? A. Curve 1 on Sheet No. 1 shows the Holtwood hourly 25-cycle generation. This generation is fairly typical of the hydro generation during the high load period of the day. On Friday the heavy generation extending into the evening hours is due to the upswing in flow. It may be seen that the average daily flow increased to 7,600 c. f. s. on Saturday and then dropped off to 6,300 c. f. s. on the following day. The shaded red hour, 11 A. M. on Wednesday, was the weekly peak load hour on the Safe Harbor-Baltimore-Holtwood pool. For that hour the 25-cycle generation at Holtwood was 65,000 kw.

Q. Mr. Thomas, will you explain curve 2? A. Curve 2, which looks almost like a straight line, illustrates the first way in which Holtwood's 25-cycle capacity is used for Holtwood Company's Pennsylvania customers. [20108] This curve shows that part of the Holtwood 25-cycle capacity which is used directly for the Pennsylvania load. For the 11 o'clock hour indicated, 5,000 kw. were delivered to Lancaster.

Q. What does curve 3 represent? A. Curve 3 represents the operation of the frequency changers at Holtwood. For the hour indicated in red, 14,000 kw. were being converted from 25-cycle energy into 60-cycle energy for the Pennsylvania customers. This is the second way that Holtwood 25-cycle capacity can be used for the Pennsylvania customers. It might be well to notice at this point that the output of the Holtwood frequency changers in general follows that of the Baltimore frequency changers, shown on curve 5, but is much less, as the capacity of the Holtwood frequency changers is about 14,000 kw. whereas the frequency changers on curve 5 have a capacity of about 90,000 kw.

Q. What is the significance of curves 4, 5 and 6? A. Curve 4 shows 25-cycle energy sent down to Baltimore from

Holtwood and received at Highlandtown. A third way of using Holtwood 25-cycle capacity for the Pennsylvania customers is to transmit 25-cycle energy to Baltimore, convert it there to 60-cycle by use of Baltimore frequency changers and then return it to Holtwood Company over the 220 kv. circuits. For the week shown most of the 25-cycle energy so received (or its equivalent, since there is a commingling of 25-cycle steam generation at Baltimore with the energy received at Highlandtown [20109] from Holtwood) was converted into 60-cycle energy.

Curve 5 shows the conversion of 25-cycle energy to 60-cycle and vice versa, by means of the frequency changers in Baltimore. Again for the week shown, most of the energy so converted (or its equivalent, since there is a commingling of 60-cycle steam generation at Baltimore with 60-cycle converter output) was sent back to Holtwood Company by way of Safe Harbor. This return of energy at 60 cycles to Holtwood Company is shown by curve 6 labeled "Net 60-cycle from Maryland to Pennsylvania" (as indicated by the footnote this curve, in addition to being the net of the two 60-cycle 220 kv. lines, also includes the transfer of single-phase 25-cycle energy at Perryville and Conowingo. This single-phase system has been included with the 60-cycle system to eliminate any objection that might be raised concerning the small amount of 60-cycle power that may be sent to Safe Harbor and then sent down the Safe Harbor-Perryville transmission line and used on the Maryland Section of the Pennsylvania Railroad).

Q. What was the magnitude of such power flow as you have described for this third way of using Holtwood 25-cycle capacity for the Pennsylvania customers at the 11 o'clock hour on Wednesday, September 18, 1946? A. This hour is indicated by the shaded red line through curves 4, 5 and 6 on sheet No. 1. 43,000 kw. of Holtwood 25-cycle power was delivered to Baltimore, which delivery [20110] accounted for part of the 55,000 kw. that entered the Baltimore frequency changers and was converted into 60-cycle

power. Of the 55,000 kw. of power so converted, curve 5 shows that 51,000 kw. of 60-cycle power was delivered by Baltimore back to Holtwood Company over the 60-cycle circuits for Pennsylvania customers.

Q. What is the fourth way that the Pennsylvania customers use Holtwood's 25-cycle capacity? A. The fourth method of using Holtwood's 25-cycle capacity for the Pennsylvania customers is by transmitting Holtwood power to Baltimore and, without the necessity of conversion, exchanging it for 60-cycle steam generation. This method of using Holtwood 25-cycle capacity for the Pennsylvania customers is illustrated by the 8 A. M. hour on Tuesday, September 17, 1946. This is the first hour of 25-cycle generation on that day as shown in curve 1. This hour is identified by the green shading. Here, while there was 17,000 kw. delivered at Highlandtown, none was converted to 60-cycle power, but instead 113,000 kw. of Baltimore 60-cycle steam generation was delivered to Holtwood Company for its Pennsylvania customers as shown in curve 6.

Q. What is the fifth way that Holtwood's 25-cycle capacity is used for the Pennsylvania customers? A. The fifth method of using Holtwood's 25-cycle capacity for Holtwood Company's Pennsylvania customers is by Holtwood [20114] Company receiving part and at times all of Baltimore's two-thirds of Safe Harbor's 60-cycle output in exchange for 25-cycle power delivered at Highlandtown. Referring to curve 7 on Sheet No. 2, this is illustrated clearly at 8:00 P. M. on Saturday, September 21, 1946 (the hour shaded blue) where 34,000 kw. of 25-cycle power was delivered to Highlandtown (curve 1, Sheet No. 1) at which time there was no net flow of 60-cycle power between Maryland and Pennsylvania (curve 6, Sheet No. 1), but all of Baltimore Company's two-thirds of Safe Harbor was delivered to Holtwood Company for use for Pennsylvania customers.

Q. Is there any other way that Holtwood 25-cycle power is used? A. Yes. A sixth type of operation is where Holtwood Company delivers 25-cycle power to Bal-



timore, but does not receive an equal or greater amount of 60-cycle power back in return, either as backfeed from Baltimore or as diversion of Baltimore Company's two-thirds of Safe Harbor output. This is illustrated by curve 8 on Sheet No. 2, labeled "Baltimore Company's Net Purchases from Holtwood Company." As may be seen, there were only a few off-peak hours on Friday evening and on Sunday, when Baltimore Company received net power from Holtwood Company. On the peak hour of the week Baltimore Company received a net amount of power equal to minus 60,000 kw.

[20112] Q. What does curve 8 further indicate? A. This curve indicates that the amount of Baltimore Company's net purchase from Holtwood Company for the week in question was a large negative figure—i. e., Baltimore Company actually supplied a much larger amount of energy to Holtwood Company than Baltimore Company received from Holtwood Company. The hourly values in curve 8 are computed in the same manner as the monthly and annual figures computed by Holtwood Company and shown in Item 22 of the inter-company energy accounting statement, Exhibit 143 and Exhibit 471. For the month of September, 1946, as a whole the net purchase by Baltimore Company from Holtwood Company was also a large negative figure.

[20141] By Mr. STURTEVANT:

Q. Mr. Thomas, Holtwood Company in its Form 12 report to the Federal Power Commission for 1945, Schedule 16, line 1-B shows the dependable hydro capacity of the Holtwood and Safe Harbor plants combined for 1945 as 295,000 kw.

[20142] Do you agree with this figure? A. No, sir; I believe it is entirely too high.

Q. What were the dependable hydro capacities of the Holtwood and Safe Harbor plants combined for the years 1944, 1945 and 1946? A. The actual dependable capaci-

ties as reported by Baltimore Co. in the so-called pool Form 12 report were, for 1944, 122,000 kw.; for 1945, 161,000 kw.; for 1946, 167,000 kw.

[20149] Q. Mr. Thomas, when the hearing was recessed yesterday afternoon, you had just testified with respect to dependable hydro capacity of the Holtwood and Safe Harbor plants. What do you mean by dependable hydro capacity? A. By dependable hydro capacity, I mean the dependable capacity as defined in paragraph 1-B of the instructions of Schedule 16 of the FPC Form 12 report.

[20150] Q. Mr. Thomas, is dependable hydro capacity the same thing as hydro capacity value? [20151] A. No, it is not, as Baltimore Company interprets that definition.

Q. What do you mean by the term "hydro capacity value"? A. By hydro capacity value I mean the amount of steam generating capacity which is replaced or rendered unnecessary in the system by the hydro supply.

Q. Will you explain the principal differences between dependable hydro capacity and hydro capacity value? A. Dependable hydro capacity, as I have defined it, is susceptible of reasonably exact determination and is largely independent of judgment.

On the other hand, the hydro capacity value involves consideration of various factors which are additive to what I might call the bare bones of dependable capacity under the most adverse flow conditions.

[20169] Q. Mr. Thomas, are there any specific technical objections to Mr. Watchorn's study which he has submitted in this proceeding? A. There are some. One is the uncertainty as to the definition of forced outages of steam plants. Another is that Mr. Watchorn used his own estimates for load shape which were based on a past year, I believe, 1941 instead of actual recent load shapes.

MR. SPARKS: Now I would like to make one other statement, Mr. Examiner.

This witness is in the habit of launching into a long discursive answer every time he is asked a question, and it prevents Respondents from making a proper objection and it has happened all morning.

I think Your Honor should direct the witness to make his answers responsive, and not to launch into long, expansive discussions and debates about the subject.

[20170] TRIAL EXAMINER: I think this: I think that Respondents' counsel's objection to the character of the answers is well taken.

MR. GOLDBERG: Of course I might observe, Mr. Examiner, that Respondent's counsel had no objection to their witnesses making the same type of answers on cross-examination.

TRIAL EXAMINER: I cannot go back into the case.

[20175] By Mr. STURTEVANT:

Q. At transcript page 16,682, lines 19 to 21 Mr. Spaulding said that Baltimore Company has no obligation in connection with any of the firm power obligations of Holtwood Company to its Pennsylvania customers.

[20176] At transcript page 16,669, line 23, Mr. Spaulding said, "Baltimore Company is one of several suppliers of supplemental energy, but I do not agree that as a supplier it is in any different position, in fact, than any of the other several interchange customers of Penn Water and there is no actual burden to Baltimore Company in so doing". Do you agree with these statements?

[20178] THE WITNESS: No, I do not. Baltimore Company has definite obligations to Holtwood Company to enable it to supply its firm-power customers and the Pennsylvania

customers do not have such obligations. As suppliers Baltimore Company and the Pennsylvania customers are entirely different.

By Mr. STURTEVANT:

Q. Mr. Thomas, does your answer relate to the capacity as well as backfeed? A. Yes. Baltimore has obligations to supply both capacity and backfeed.

Q. What are the Baltimore Company's obligations to supply capacity in connection with the firm power obligations for the Holtwood Company to its Pennsylvania customers? A. Baltimore Company is obligated to supply such capacity as is required to enable Holtwood Company to meet its firm-power [20179] obligations. As a result of the contracts and the overall economic set-up Baltimore Company has the same obligations in that respect that a single utility would have if a single utility owned and operated all the facilities of the Baltimore-Holtwood and Safe Harbor Companies.

Q. When you refer to the contracts, do you mean the contracts designated as Items E to I in this case? A. Yes.

Q. Now, Mr. Thomas, as to this capacity obligation, can you be more specific as to the basis of your statement as to Baltimore Company's contractual obligation? A. The obligation of Baltimore Company to supply capacity is the result of the over-all contractual set-up that was made in 1931 when Baltimore Company assumed the obligations that go with the purchasing of the entire output not required to meet other customers' needs under contracts that have to be approved by the Baltimore Company. Baltimore Company under that supplemental agreement which is Items H and I in this case, purchases the entire output of Holtwood Co. not required for customers under contracts approved by Baltimore Co.

[20180] THE WITNESS: Article V of the contract provides that Holtwood Company cannot make an investment of



over \$50,000 without obtaining the approval of Baltimore Company; that it cannot dispose of or alienate property without Baltimore Company's approval and Baltimore Company's approval is required under Article IV of Holtwood Company's agreements for the purchase or interchange of electric and hydroelectric power, or before making any substantial modification in existing contracts. The over-all effect of all of this is that Baltimore Co. necessarily has to stand behind the system.

When I say that Baltimore Company is obligated to provide capacity I did not mean to say that all of that capacity has to be in Baltimore. If Holtwood Company, with Baltimore Company's approval, installs capacity Baltimore Company pays all the fixed and operating expenses and therefore incurs all of the costs and expenses the same as if the capacity was put in Baltimore.

[20185] Q. Please state whether or not any of the generating capacity installed by Baltimore Company since 1931 was for the purpose of enabling Holtwood Company to meet its firm power obligations in Pennsylvania? A. Yes, it was.

[20191] Q. Article 6 of the 1927 contract between Baltimore Co. and Holtwood which is Item H in this record, reads as follows:

"Upon request of Power, Electric will supply to Power steam generated energy in excess of Electric's own requirements up to the limit of its available generating capacity provided, however, that Electric is not obligated to start up a station which would not otherwise be operated. For all such energy Power will be billed for the daily net amount of such backfeed at actual cost plus 10 per cent. The costs to be used [20192] are those reported in Electric's monthly production statement covering the month during which steam energy was furnished to Power."

Now are your statements as to Baltimore Company's contractual obligations in any way based on the provision of Article 6 which I have just read? A. No. That article is a dead letter. No billing has been carried out under the ten per cent provision since 1932, I believe. The provision that Electric—which I call Baltimore Co.—is not obligated to start up a station which would not otherwise be operated, is a completely dead letter, and until I heard it quoted in this hearing the other day I had forgotten it was in there.

When I got back to Baltimore I tried it out on Mr. Greer and Mr. Brunner and one or two others and none of them remembered that was in there. The fact is that we have started up the Pratt Street standby station without any reference to that article to supply firm load to the firm power load of the Baltimore-Pennsylvania customers' system at the time when it was not needed for interchange. The station has been started up at other times when it was primarily for interchange.

Q. Now, did that article become a dead letter prior to or subsequent to the execution of the 1931 supplemental agreement?

[20193] THE WITNESS: Subsequent to the 1931 contract.

By MR. STURTEVANT:

Q. Why did it become a dead letter subsequent to the execution of the 1931 supplemental contract? A. Because those contracts gave Baltimore Company the obligation which I have previously explained to back up the Holtwood system.

[20325] By MR. REIBLICH:

Q. Mr. Thomas, at page 20058 of the transcript, you were asked a question, and I quote:

"Is Safe Harbor Company a party to certain contracts other than the contract with Baltimore Com-

pany and Holtwood Company identified as Items E, F and G?"

And you answered, "Yes, it is."

To what contracts were you referring?

. . .

[20331] THE WITNESS: I was referring to the contracts with Pennsylvania Power and Light Company, Exhibit 76, I think; Philadelphia Electric Company, Exhibit 73, and Pennsylvania Railroad Company, Exhibit 10.

By MR. REIBLICH:

Q. Does the Safe Harbor Company sell any electric energy under these contracts?

MR. SPARKS: Now, I object to that, Mr. Examiner. That is the type of cumulative testimony that we argued about all day yesterday, Mr. Examiner.

TRIAL EXAMINER: Just a minute.

MR. REIBLICH: Mr. Examiner, it is a perfectly proper question. It was caused as a result of testimony that was stricken out on the pages to which we have already referred, and I do not see that it calls for an extended answer. It will not have an extended answer, but it certainly is a matter with reference to which we are entitled to have this witness testify in the record.

TRIAL EXAMINER: May I have the question?

(Question read.)

MR. REIBLICH: We are certainly a party in interest directly affected on that point.

MR. SPARKS: I think I can point out, Mr. Examiner, [20332] very simply, what it is. In the question beginning at line 16 on page 20058 there were certain quotations—you will see them at the bottom of the page. Then the question was: "Do you agree with

those statements?" which are in quotes. The witness said, "Yes, I do." And Your Honor struck that out.

TRIAL EXAMINER: The reason that answer was stricken was because that is not the proper way to introduce testimony. If the witness knows, he is entitled to say, and if he does know there is no necessity for referring to any other source for information.

MR. SPARKS: But it is purely cumulative, Mr. Examiner. That was one of the points in the motion to strike those portions all the way through.

TRIAL EXAMINER: Well, in view of the importance of the issue involved, the Examiner will permit the question to be put. Answer the question.

. . .

THE WITNESS: No, it does not. These contracts involve no rates or charges for the sale or transportation of energy by Safe Harbor Company.

By MR. REIBLICH:

Q. Referring to page 20067 of the transcript, Holtwood Company has introduced in this proceeding as Exhibit No. 163 [20333] an order of the Public Service Commission of Pennsylvania dated January 10, 1933, authorizing the Safe Harbor Water Power Corporation to sell electric energy or power to certain utility companies in Pennsylvania.

Why was this authority obtained?

MR. SPARKS: Now, just a minute, Mr. Examiner. I object to that. If you will look at the bottom of page 20067, beginning with line 20, that very answer which would be called for by this question, I assume, was stricken out.

TRIAL EXAMINER: Well, the Examiner made a statement in connection with its reintroduction in evidence. The objection is overruled.



**THE WITNESS:** This authority was obtained so that Safe Harbor Company might enter into Holtwood Company's contracts with the Pennsylvania customers in order to avoid double taxation under the Pennsylvania gross receipts tax law, and to simplify accounting and operating arrangements.

**MR. SPARKS:** Now, Mr. Examiner, I move to strike it. It is obvious that they are getting back in exactly what you struck out, because the witness read word for word from the transcript beginning at line 20 and ending at line 24 of page 20067.

**TRIAL EXAMINER:** The motion to strike is denied. The reason for the other ruling was that the question at line 16 at 20065 was no predicate for whatever might have been left [20334] in the answer if the sustaining of the motion to strike had been qualified to save a part of the answer which the witness has now restated.

**By Mr. REIBLICH:**

**Q.** Has Safe Harbor Company ever exercised this authority?

**MR. SPARKS:** Just a minute. May I ask what the purpose of that question is?

**MR. REIBLICH:** To reinstate the rest of the answer, Mr. Examiner, which is related to the preceding question that I have just asked.

**MR. SPARKS:** May I ask counsel where it appears in the transcript?

**MR. REIBLICH:** At the bottom of page 20067.

**MR. SPARKS:** I do not see anything there in the answer relating to the question as to whether Safe Harbor—oh, I see it is at the bottom of the page beginning at line 24. I object to it for the same reason, Mr. Examiner, that the question calls for an exact answer apparently that is at the bottom of page 20067 beginning at line 24.

TRIAL EXAMINER: For the reasons previously stated by the Examiner the objection is overruled.

THE WITNESS: No, it has not.

[20711] GEORGE W. SPAULDING.

DIRECT EXAMINATION.

By MR. SPARKS:

[20772] Q. You are the same G. W. Spaulding who has previously been sworn and who has testified in this proceeding, are you? A. I am.

Q. At page 19876, line 6, Mr. Davis states that "emergency energy would be in the nature of firm power and if 21 million of that 72 were in the nature of firm power, by being emergency energy, it would change the allocation on the principle that I have used there, as a benefit to Metropolitan Edison and to the economy interchange." Mr. Spaulding, is it correct to consider emergency energy as firm energy?

[20774] THE WITNESS: No.

By MR. SPARKS:

Q. Is the term "emergency energy" used in interchange transactions only when the purchasing company has no alternate source of obtaining interchange energy?

THE WITNESS: No, interchange energy is frequently accounted for as "emergency energy" under our interchange contracts in connection with various kinds of interchange transactions, and is not limited to those transac-

tions where the receiving company had no other alternate source of supply.

[20775] Q. Mr. Spaulding, in 1946 did Metropolitan Edison have other alternate sources of energy available to it during those hours when Penn Water reported emergency energy was supplied to Metropolitan Edison?

THE WITNESS: Yes, they only obtained it from Penn Water because it was available from Penn Water at a lower cost than from any of their other several available sources.

By MR. SPARKS:

Q. Was the 21,951,000 kwh which was accounted for as emergency energy in 1946 transmitted by Penn Water to Metropolitan Edison Company over the Holtwood-Violet Hill transmission lines?

[20776] THE WITNESS: No, a substantial part of such energy was transmitted over the Safe Harbor-Harrisburg tie to the Pennsylvania Power & Light Company.

[20777] Q. In connection with Mr. Thomas' testimony relating to the history and development leading up to the contractual apportionment of Safe Harbor output, as he called it, he testified at page 20061, line 11, that the load and revenue studies indicated that, if Baltimore Company purchased part of Safe Harbor output and Holtwood Company the remainder, about the most Holtwood Company could risk taking was about one-sixth. Is it a fact that the load estimates made in 1930 of the future requirements of the Pennsylvania customers were materially different from the loads which have actually been experienced?

THE WITNESS: No, the actual loads we have been experiencing are not materially different from those estimated in 1930.

By MR. SPARKS:

Q. Mr. Spaulding, at page 20076, Mr. Thomas testified that the fuel rate adjustment clause of the Coatesville contract was based on the premise that the energy supply included generation of the Baltimore steam plants which was a recognition that the energy for these sales came in part from the resources of Baltimore Company. Is this testimony of Mr. Thomas correct? A. No. The Coatesville fuel rate adjustment clause was not a recognition that the energy came in part from the resources of Baltimore Company. The fuel rate adjustment formula [20778] used in the Coatesville Power Supply Contract was merely lifted out of the Railroad Contract and modified in certain respects. The adjusted formula was used because it was found, after study, that it would provide an adjustment which would conform with variations in the operating expenses of Penn Water and Safe Harbor.

[20779] Q. Mr. Spaulding, at page 20078, Mr. Thomas testified that when the initial drafts of the 1946 contract with Metropolitan Edison Co. were submitted to Baltimore Company, in which it was proposed that Safe Harbor Company would continue to be a party, Baltimore Company questioned whether taxes had been saved through Safe Harbor Company being a party to the existing contract, and pointed out that no power and energy were actually sold by Safe Harbor Company to Metropolitan Edison Company, whereupon "Holtwood Company agreed to the omission of Safe Harbor Company as a party to the renewal contract." Is this a correct statement? A. It is not a correct statement.

Q. Will you please state what the facts were? A. An early draft of a proposed contract with Metropolitan Edison Company was submitted to Baltimore Company for their comment on July 17, 1945. In this draft Safe Harbor was a joint party in all respects with Holtwood Company in connection with the supply to Metropolitan Edison Company. Under date of August 3, 1945, Balti-



more Company, through Mr. Greer, addressed a memorandum to me as a member of the Operating Committee commenting upon this proposed draft of contract with Metropolitan Edison Company. There were five comments in this memorandum respecting this early draft, but there were no comments relating to Safe Harbor's joint participation or suggestions that it should not be a party to the proposed contract. On October 19, [20780] 1945, I submitted to Mr. Greer, a revision of the early draft of this Metropolitan Edison Contract, this draft being dated October 18, 1945. This draft did not contain Safe Harbor as a joint or participating party. During the interval between August 3 and October 19, 1945, there were no discussions with Baltimore Company about this proposed contract, other than relating to progress.

On October 27, I had a long discussion with Messrs. R. T. Greer and R. L. Thomas regarding this Metropolitan Edison Contract at which time many features and details were discussed. It was at this conference that Baltimore Company particularly urged certain further changes in the agreement.

These matters related to Baltimore's objection to the tax clause provision, to the fuel rate adjustment provision, and to the wording of the regulatory approval clause. Baltimore Company at no time suggested, or contended that Safe Harbor should or should not be a party to the Metropolitan Edison Contract. That decision was made solely between Penn Water and Metropolitan Edison Company.

Q. At page 20119, line 16, Mr. Thomas testified that your Exhibit 361 implied a relationship which did not exist between Baltimore Company's 25 cycle peak load and Penn Water's monthly 25 cycle peak deliveries at Highlandtown, because the data shown on your Exhibit 361 for each month were not coincident. Does the fact that Baltimore Company's [20781] 25 cycle load requirements and the 25 cycle peak deliveries for each month do not occur on the same hour in any way affect your testimony relating to Exhibit

3611 A. No, it does not. In connection with my testimony I recognize that there is not always a coincidence of the monthly peak deliveries of 25 cycle service to Baltimore Company at Highlandtown with Baltimore Company's maximum 25 cycle system requirements. While the magnitude of the daily 25 cycle peak varies, had I shown on Exhibit 361 the actual deliveries at Highlandtown on the hour of the 25 cycle monthly peak requirements in Baltimore, this new curve would lie generally parallel to the peak delivery curve and slightly below it.

Q. Mr. Spaulding, is there a relationship between the 25 cycle delivery at Highlandtown and Baltimore Company's 25 cycle load? A. Yes, there is and it is not the fortuitous result of the flow of the Susquehanna River or the fact that a large part of the output has to go to Baltimore, that the deliveries at Highlandtown are scheduled in the present manner; rather it is because Penn Water's system was planned that way and is operated that way in order that Baltimore Company's own requirements may be delivered to it at the frequency and at the geographic location in Baltimore City where it is most useful to Baltimore Company.

. . .

[20782] Q. Does Holtwood Company at all times have to transmit a large part of its Holtwood hydro output to Baltimore Company? A. No, during the larger part of the year, Holtwood Company has an option as to the proportion of its 25 and 60 cycle hydro generation at Holtwood and as to its deliveries at Highlandtown and to its other customers. Penn Water's day to day choice of generation is in large part in consideration of Baltimore Company's 25 cycle requirements and in part for overall system economy. Baltimore's own 25 cycle generating capacity is the highest cost and most inefficient capacity operating on the system and Baltimore naturally desires to restrict its operation to the maximum extent possible.

. . .

[20784] Q. Mr. Spaulding, does Baltimore restrict its operation to the maximum extent possible?

THE WITNESS: As a member of the Operating Committee and one who considers those matters with the operating people [20785] I know that Baltimore plans their operation in such a way as to restrict the operation of their 25 cycle capacity to a minimum.

MR. GOLDBERG: May I have the question and answer?

(Record read.)

THE WITNESS: By that, Mr. Examiner, I mean that they endeavor to keep their 25 cycle capacity shut down and to generate a minimum amount of energy with such capacity.

By MR. SPARKS:

-Q. At page 20120, Mr. Thomas testified that Baltimore has 145,000 kw of 25 cycle generating capacity and about 70,000 kw frequency changer capacity, which capacity is far in excess of Baltimore Company's 25 cycle system peak. Could Baltimore Company supply its own 25 cycle system requirements without the assistance of 25 cycle service from Holtwood delivered at Highlandtown? A. No, it could not. Baltimore Company's 25 cycle distribution system was not provided to carry its 25 cycle load requirements without the assistance of capacity, energy and other electric services supplied by Penn Water at Highlandtown. Without Penn Water's services, Baltimore would be unable to maintain voltage or provide the expected degree of service reliability to its 25 cycle industrial customers.

[20787] Q. Mr. Spaulding, at page 20143, Mr. Thomas referred to the "Pool Report for the Combined PW-SH-Baltimore-Bethlehem Steel and Washington System" for 1946 filed with the Federal Power Commission by Balti-

more Company. Do you agree that the data shown and the statements accompanying Schedule 16 of this pool report are correct? A. No, I do not.

Q. Has Penn Water advised Baltimore Co. that it does not agree with this pool report? A. Yes, by letter dated June 20, 1947, and filed with [20788] the Federal Power Commission, as a part of the Penn Water-Safe Harbor System, Form 12 report for 1946.

Q. Did Penn Water or Safe Harbor participate in the preparation of this pool report? A. No, neither Penn Water nor Safe Harbor participated in nor were they consulted in connection with the preparation of this pool report by Baltimore Company.

Q. At page 20158, line 15, Mr. Thomas testified in respect to the valuation of drawdown as a capacity value of the hydro plants, that the operating men shun the idea of depending on drawdown because they do not want to get caught with a low pond. Will you state whether, notwithstanding Mr. Thomas' statement, the operating executives of Baltimore Co. did recognize and rely on such additional value of hydro capacity? A. Yes, Baltimore Co.'s management has recognized and relied upon the value of drawdown through the years, up to and including 1941, both in connection with contractual negotiations and renewals and in the evaluation of hydro service for all purposes.

Q. Has Baltimore Company ever indicated to the Federal Power Commission that it relied upon hydro capacity in excess of that available under most adverse river flow conditions experienced in each calendar month? A. Yes, under date of February 27, 1941, Baltimore Company wrote the Commission and therein stated that the [20789] available hydro capacity for the greater part of the time was equal to or greater than the amount of hydro capacity which I have used in Exhibits 35 and 378; and further stated that in the peak load season of November and December, the potential hydro capacity in nine out of ten years has been equal to or greater than the amount of dependable hydro capacity which I have used in Exhibits 35 and 378.



MR. SPARKS: At this time may the two letters which Mr. Spaulding just referred to be identified with the appropriate exhibit number?

TRIAL EXAMINER: The witness has referred to only one, has he not?

MR. SPARKS: Yes, sir. We have attached to the letter to which he has referred also the letter from the Federal Power Commission to Consolidated Gas Electric Light and Power Company requesting the data which was given in the letter to which Mr. Spaulding referred.

Now, we attached it merely for convenience, but we do not insist on the letter of the Federal Power Commission going in. We thought it would be proper.

TRIAL EXAMINER: The two letters are stapled together?

MR. SPARKS: Yes, sir.

TRIAL EXAMINER: The document handed the reporter may be marked Exhibit 500 for Identification.  
(Exhibit No. 500 is marked for Identification.)

[20790] Q. I hand you the document which has been marked Exhibit 500 and ask you if the first letter which is part of that exhibit, and which is dated January 9, 1941, is a copy of a letter addressed to the Consolidated Gas Electric Light and Power Company by Leland Olds, Chairman, F. P. C.?  
A. Yes.

Q. I ask you whether the second letter to which are attached two tabulations, and which is dated February 27, 1941, and signed by F. E. Ricketts, Vice President, addressed to the Federal Power Commission, is the letter to which you [20791] have just referred? A. It is.

Q. Has Baltimore Co. ever reported to the Federal Power Commission a net dependable capacity available from the Safe Harbor and Holtwood Developments in ex-

cess of the figure testified to by Mr. Thomas and developed in his Exhibit 477? A. Yes, under date of February 10, 1942, Mr. R. T. Greer wrote to Mr. A. J. Kohler, who was the Senior Engineer in the Federal Power Commission's Baltimore Office at that time, advising them that after the adoption of certain changes in reporting capability of generating plants without deduction for station uses or transmission losses, the "net dependable capacity available from system hydro plants" would be 265,000 kw. This letter confirmed discussions with the Federal Power Commission held prior to the introduction of "Eastern War Time" and before the system load shapes were affected by the extended around-the-clock efforts in producing war materials.

MR. SPARKS: May we have marked as Exhibit 501 a three-page letter dated February 10, 1942, or rather a copy of a three-page letter addressed to Mr. A. J. Kohler, Associate Engineer, Federal Power Commission, and signed R. T. Greer, Director, Inter-System Power Utilization Bureau.

TRIAL EXAMINER: The document referred to is marked Exhibit 501 for Identification.

(Exhibit No. 501 is marked for Identification.)

[20793] Q. Mr. Spaulding, in your last answer before the mid-afternoon recess you referred to a letter from Mr. R. T. Greer to Mr. A. J. Kohler dated February 10, 1942.

I show you a document consisting of three pages, which has been marked Exhibit 501, and ask you if Exhibit 501 is the document to which you there referred? A. It is.

Q. At page 20168, line 2, Mr. Thomas referred to Mr. Watchorn's method of determining dependable hydro capacity by applying the theory of probability, and stated "It was not revealed to Baltimore Company until it was filed in this case although there were repeated discussions of hydro capacity [20794] value over the last two or three years." Is this a correct statement? A. It is not. Balti-

more Co., on several occasions during the spring and summer of 1946, discussed the capacity value of hydro with us. Mr. Thomas, on one occasion stated in effect that we must have used a "Probability Method" to get our dependable capacity figure of 295,000 kw, and I remarked to him that such an approach certainly was not new to him, because he had at one time advocated such a method. His reply was to the effect that his people would never accept our figure however it was determined.

[20796] Q. Did Penn Water at any time offer to show Baltimore Co. Mr. Watchorn's determination of dependable hydro capacity using the theory of probability? A. Yes, at my direction Mr. Watchorn and an associate went to Mr. Greer's office to discuss this matter with Baltimore Company's representatives in connection with the 1945 [20797] pool report on FPC Form 12 early in 1946. My instructions to my associates were to give them a copy and explain in detail the derivation of the 295,000 kw. My associates reported to me after the conference that Baltimore Company's representatives raised no question as to our derivation of 295,000 kilowatts of dependable capacity.

Q. Mr. Spaulding, referring to the testimony beginning at line 24 of page 20,178 and continuing on page 20,179, Mr. Thomas states that Baltimore Co. is obligated to supply such capacity as is required to enable Holtwood Co. to meet its firm power obligations. He also states that as the result of the contracts and the over-all economic set-up, Baltimore Company has the same obligations in that respect as a single utility would have if a single utility owned and operated all the facilities of Baltimore, Holtwood and Safe Harbor Companies. Is Mr. Thomas' statement a fact? A. No.

Q. At page 20,185, Mr. Thomas testified that the "Generating capacity installed by Baltimore Company since 1931 was for the purpose of enabling Holtwood Company to meet its firm power obligations in Pennsylvania." Is that a cor-

rect statement? A. No, it is not, nor is it in accord with Baltimore's repeated statements through the years that they were the residual receiver under the hydro contracts, a position [20798] which they maintained up to these proceedings.

[20799] Q. Why do you say Mr. Thomas' statement is not correct? A. As the requirements of the Pennsylvania customers have increased since 1931, the capacity, energy and other electric service requirements of these customers have been met by Penn Water or by Penn Water and Safe Harbor with the result that less capacity and energy services are available for the use of [20800] Baltimore Company. Through the years, Penn Water and Baltimore Company have always recognized that this growth in Pennsylvania customer loads required Baltimore Company to provide additional capacity in Baltimore, in part due to growth in Baltimore's own system load and in part to replace the capacity services no longer available to Baltimore because of the increased requirements of the Hydro Companies' Pennsylvania customers.

Q. At page 20,192, Mr. Thomas testified that Article 6 of the 1927 Agreement is a "dead letter" and became a "dead letter" subsequent to the execution of the 1931 Supplemental Agreement. Prior to the time Mr. Thomas made that statement, had Baltimore Company ever to your knowledge taken the position in connection with Article 6 of the 1927 contract that it was no longer in effect? A. No.

Q. Subsequent to 1931, have Baltimore Company and Penn Water given consideration to the need for billing for backfeed under Article 6 of the 1927 Agreement? A. Yes, they have.

Q. In what connection? A. In September, 1941 the Operating Committee recognized that there had been a net amount of monthly backfeed received by Penn Water from Baltimore Company for the month of August, 1941.



[20801] After consideration, the Operating Committee, consisting of Mr. F. E. Ricketts and myself, went to Mr. E. M. Sturtevant, counsel for Baltimore Company, and discussed this matter of billing under Article 6.

Mr. Sturtevant advised the Operating Committee that Baltimore Co. need not bill Holtwood Company for net backfeed in August, 1941, because the effect of such billing on either Baltimore Co. or Penn Water would be unimportant and that no other parties would be affected. Based on Mr. Sturtevant's opinion, the Operating Committee agreed there would be no formal billing for the net monthly backfeed in August 1941. In those discussions between Mr. Sturtevant and the Operating Committee, neither Mr. Sturtevant nor either member of the Operating Committee indicated that Article 6 of the 1927 contract was no longer in effect.

Q. Are there any provisions in any of the contracts between Baltimore Company and Penn Water which provide for any operating responsibility of Baltimore Company to provide electric energy to Penn Water, other than whatever operating responsibility may be provided in Article 6 of the 1927 Agreement?

[20803] THE WITNESS: No, there are none.

TRIAL EXAMINER: Now, you are testifying there upon the basis of your knowledge of the operations conducted by the Respondents under those contracts?

THE WITNESS: Yes, sir, I am.

[20804] Q. Mr. Spaulding, is Mr. Thomas on record as stating that this Article 6 is still in force and effect? A. Yes, he is. In a letter dated November 2, 1933, addressed to Mr. George T. Hambright, re "Back-feed Steam", he stated as follows:

"Backfeed steam is purchased by Holtwood Company from Baltimore Company under the following Ar-

ticle 6 of the power agreement of December 31, 1927 between the Baltimore and Holtwood Companies (in this agreement 'Electric' means Consolidated Gas Electric Light and Power Company of Baltimore and 'Power' means Pennsylvania Water & Power Company):

“‘*Steam Energy Purchased*—Upon request of Power, Electric will supply to Power steam generated energy in excess of Electric's own requirements up to the limit of its available generating capacity, provided, however, that Electric is not obligated to start up a station which would not otherwise be operated. For all such energy Power will be billed for the daily net amount of such backfeed at actual costs plus ten per cent (10%).’ The costs to be used are those reported on Electric's monthly production statement covering [20805] the month during which steam energy was furnished to Power.’

“This article still is in full force and effect because the Supplemental Agreement of June 1, 1931 did not modify this provision and specifically reaffirmed all provisions of the 1927 agreement not inconsistent with the 1931 Supplement.”

Q. Mr. Spaulding, beginning at line 20 of page 20,193 and continuing on to page 20,194, Mr. Thomas gave as one of his reasons why he considered the results of your Exhibits 35 and 378 incorrect and without merit, that your exhibits were based on the combination of Holtwood and Safe Harbor and, therefore, do not have value in determining an allocation as between Holtwood and Safe Harbor. Have Baltimore and Penn Water ever considered or attempted to determine an allocation between Holtwood and Safe Harbor? A. No, Baltimore Co. and Penn Water have always considered Penn Water and Safe Harbor as a single operating unit for all purposes of determin-

ing or evaluating the service from these hydro companies to Baltimore Company.

[20814]

CROSS-EXAMINATION.

By MR. GOLDBERG:

[20836] Q. Now, then, you state at transcript 20,782 that Penn Water's day to day choice of generation is in large part in consideration of Baltimore Company's 25 cycle requirements and in part for over-all system economy.

Can you be specific and tell us what "large part" means? Is it 70 per cent, or what figure? A. No, I don't believe I can put an evaluation on that, Mr. Goldberg, as a percentage.

Q. Can you put any type of an evaluation on it other than the phrase you used? A. Well, it happens that in supplying Baltimore's 25-cycle requirements by Holtwood hydro generation, it is assisting in the over-all system economy, so that I cannot differentiate between that part of the time when the choice is made for 25-cycle requirements and that part of the time that it is made solely for over-all system economy.

Q. Does your testimony mean that Baltimore Company [20837] could not at any time supply its own 25-cycle system requirements without 25-cycle service from Penn Water at Highlandtown? A. No, indeed.

Q. Under what circumstances, then, would you say that Baltimore Company could not supply its own 25-cycle system requirements without 25-cycle service from Penn Water at Highlandtown? A. When those requirements are of a magnitude such as is experienced during the daytime hours when industrial plants are operating. I did not mean to imply that they could not get along without services during the week-ends or during the midnight hours, although even

during those hours there is frequent demand on us for voltage regulation and power factor cooperation.

•   •   •

Q. Do you limit your testimony regarding the needed assistance of Penn Water's 25-cycle service at Highlandtown to maintenance of voltage or expected degree of service reliability to the industrial customers?

•   •   •

[20838] THE WITNESS: No, I did not intend to so limit it.

By MR. GOLDBERG:

Q. But speaking in those terms you intended to include energy services as well, is that right?     A. Energy and capacity services.

Q. Can you please explain for us, particularly for me, what you mean by "expected degree of service reliability"?  
A. If there were no 25-cycle services delivered at Highlandtown, Baltimore's 25-cycle distribution system would not have sufficient capacity to meet the requirements of its customers during the higher load periods of the 25-cycle system with anywhere near the degree of reserve cable capacity, transformer capacity and otherwise, to assure continuity of service to those customers, without services from Holtwood.

A few years ago they did not even have cable capacity enough to meet their peak requirements, let alone have cable reserves. I haven't checked that matter in the last few years but there hasn't been much change in load and there has been no additional cable or transformer capacity installed so that I would expect the situation to be about the same with respect to that 25-cycle system.

Q. Then if I understand your testimony you mean that Consolidated might very well fail to meet the demands of its industrial customers if it was unable to secure from Penn Water the 25-cycle services at Highlandtown, is that it?     [20839] A. That is right, during certain portions of the load cycle.



Q. What were those portions of the load cycle again?

A. During the on-peak periods, roughly from 8 or 9 o'clock in the morning until 5 or 6 o'clock at night.

\* \* \*

[20841] Q. Here is my difficulty, Mr. Spaulding. I thought it peculiar that you should have stopped with the year 1941. Now then, that leaves a gap, 1942 to 1943—let's take that gap because that is before this hearing started. In that period of time, 1942 to 1943, did Baltimore Company's management recognize and rely upon the value of draw-down?

A. I am not in a position to know what the management [20842] recognized and relied upon after the spring of 1942, other than statements made to me by certain officers of Baltimore Company in which they professed that their change in reporting the value of drawdown did not change their reliance upon the actual conditions, and that the change was only being made during the war years when there was a marked change in load shape and when there was the uncertainty of how much additional load might be imposed on the system in the war effort by OWU and others.

I had been under the impression during that time that there was no change on their part, but certainly in their statements to the regulatory bodies—and by regulatory bodies I include the Federal Power Commission and OWU who was, in a way, a regulatory body during the war years—they placed less emphasis or, I should like to say, they de-emphasized the value of drawdown, and for a very good reason during the war years, but they did not go back, as they had professed they would after the war was over, and give it the same recognition that they had given prior to the spring of 1942.

Now, what they had in their mind at that time I, of course, am not in a position to state.

Q. Is this the fact, that you cannot state whether or not Baltimore Company's management recognized and relied upon the value of drawdown during the period 1942

to 1943, inclusive? A. They told me one thing and they reported something [20843] else to the Government agencies. Therefore I don't know the degree to which they relied upon it.

Q. You cannot answer my question as to their reliance, then, in those years upon the value of drawdown, is that right? A. That is right.

Q. And that applies, does it not, to 1944, 1945 and 1946? A. I would say that situation did not change in 1944 and in 1945 and 1946 we were approaching the present proceedings and they did not change back to their former reliance upon it, so far as their published and formal statements were concerned to the regulatory agencies.

[20853] Q. Referring to Tabulation No. 1 which is attached to Consolidated's response, which is a part of Exhibit 500, it is there stated, is it not, that the values are based, in Columns 3 and 4, on "the present load shape," namely, 1941, isn't that so? A. It is.

Q. And is it your statement that your 295,000 Kw. is directly comparable to the values reported by Consolidated in that Tabulation No. 1 I have referred to, namely, Columns 3 and 4, having in mind the load shape basis for the values reported in Exhibit 500? A. No, they are not directly comparable.

Q. You state in your testimony regarding Exhibit 500 that Baltimore Company has indicated to the Federal Power [20854] Commission that it relied upon hydro capacity in excess of that available under most adverse river flow conditions experienced in each calendar year month. Now then, referring to Consolidated's response, which is a part of Exhibit 500, where does Consolidated state that it relies on those capacities? A. I think it is implied by the entire letter.

Q. You get it by implication, is that it? A. Yes.

Q. Having in mind that Consolidated in its answer to the Commission, which is a part of Exhibit 500, stated on

page 2 of its response that "These monthly hydro capacity figures are not on the same basis as that which is used to determine requirements for capacity installation and which is reported on FPC Form 64 in connection with the annual peak," would you say that your 295,000 Kw. is likewise not on the same basis as that which is used to determine requirements for capacity installation?

\* \* \*

THE WITNESS: No, I would not.

By MR. GOLDBERG:

Q. Then if I understand that testimony your 295,000 Kw., you are saying, is on the basis of use to determine [20855] requirements for capacity installation? A. No, I did not say that, but I would not agree that likewise it is the same as the quotation on page 2, and that is the reason I answered as I did.

\* \* \*

[20866] Q. Mr. Spaulding, will you refer to transcript 20797? At that point your attention is called to certain testimony of Mr. Thomas at line 24 of page 20178, which continues through page 20179, and you are asked whether Mr. Thomas' statement is a fact. You replied that it is not.

Will you please tell us why not?

\* \* \*

A. Because although the facilities, including generating and [20867] transmission facilities of Baltimore, Holtwood and Safe Harbor are coordinated, each of those companies have certain contractual arrangements with others which are quite independent of such coordination, and because each of those companies are separate corporate identities, and in the case of Baltimore and Penn Water has its equity control in the hands of the public and not in the hands of the other company.

\* \* \*

[20872] TRIAL EXAMINER: Have you made any determination in your own mind as to whether Baltimore's com-

mitments on other contracts are of such an extent that it would not enable Baltimore to meet any claimed obligations to supply capacity required to enable Holtwood to meet its firm power obligations if the claim were made under contracts E to I?

THE WITNESS: No, I am not testifying as to whether there are other obligations which wouldn't permit it; but rather they don't have any obligations under E, F and G, H and I to do so.

. . .

[20874] Q. It is by virtue of the coordination of Penn Water's operations that Penn Water was able to enter into its contracts to undertake those operating responsibilities that you referred to. Isn't that so? A. No, I do not agree.

Q. I see. In other words, you say Penn Water could have entered into those agreements and undertaken those operating responsibilities without having that coordination of operations provided for by Items E to I? A. Very definitely.

. . .

[20876] Q. Why do you say that that position has been maintained only through Mr. Thomas' testimony in Baltimore's presentation of their case in chief and not throughout this proceeding?

. . .

THE WITNESS: They have continually referred to their position as the residual receiver, and Mr. Thomas referred to that position in his direct testimony back in June a year ago, or May a year ago.

TRIAL EXAMINER: You are not implying that so far as you know they have changed that position since then?

THE WITNESS: Yes, I think that Mr. Thomas' testimony on rebuttal is very clear evidence of a somewhat different position when he refers to Baltimore operating these com-



panies as though they were all one. That is quite a different situation in my mind from considering themselves as the residual receiver.

. . .

[20881] Q. Counsel, through the witness Spaulding, brought into this record Exhibit 367. Do you have that before you? A. No, I do not.

Q. I will place it before you. Did that billing take place under Article 6? A. It did.

Q. Is it in strict conformity with Article 6? A. It is in conformance with Article 6, except as modified in small detail by agreement of the operating committee.

. . .

[20894] By MR. REIBLICH:

Q. Mr. Spaulding, at transcript 20782, lines 14 to 16, you testified that Penn Water's day to day choice of generation is in large part in consideration of the overall system economy. On cross-examination by Mr. Goldberg this morning I understood you to say that about one-third of the time in a year the river flow was such that Holtwood Company has no choice because the entire generating capacity is working at maximum output because of the river flow? [20895] A. That is about right.

Q. Isn't it also a fact that for approximately one-third of the days there is no choice during the heavy load hours of the day because all Holtwood hydro units are likewise operating?

. . .

THE WITNESS: There would be another period of time. I don't know that I would say it was another one-third.

By MR. REIBLICH:

Q. Looking at the flow duration curve that you are using wouldn't it be approximately one-third? A. I think it would be a little less than an additional one-third of the time.

Q. Isn't it a fact that even during the rest of the time, the remaining one-third, approximately, the system must be operated in the interests of over-all maximum economy?

A. The system is operated where possible in the [20896] interests of over-all system economy. That is the very reason that at times there is a larger amount of 25 cycle hydro generation at Holtwood than would otherwise be experienced. In other words, Holtwood's 60 cycle hydro is much more efficient than its 25 cycle hydro generating units, but at Baltimore it is the reverse. Baltimore's 60 cycle steam generation is very much more efficient than Baltimore's 25 cycle generation and therefore more 25 cycle hydro generation is used and sent to Baltimore in order to produce better over-all system economy.

[20983] By MR. GOLDBERG:

Q. Mr. Spaulding, at transcript 20908 you spoke of consideration being given to modernizing the Highlandtown substation in a very large degree. At the time you were referring to in that answer do you know whether any further consideration has been given to modernizing that substation since the [20984] Bailey-Oppenhimer and Greer-Von Eiff studies that you referred to in your answer?

THE WITNESS: I should like to answer it this way, that there have been no studies on the modernization of Highlandtown substation, to my knowledge, other than those that were given at that time but those studies extended, as I recall, into the year 1940.

[21013]

EDWARD S. LOANE.

## DIRECT EXAMINATION.

By MR. MYSE:

[21014] Q. Mr. Loane, do the corrections shown by Exhibit 509 include any of those previously shown in Exhibit 351 prepared as rebuttal of Exhibits 64, 249 and 292? A. They do not.

[21016] Q. Will you describe generally the changes or corrections in the assumptions used by Mr. Davis in his Exhibit 421 which were made in Exhibit 509? [21017] A. The capacity accounting shown in Table V-A has been made consistent with the energy accounting shown in Table V-B; and the costs based upon the costs of Safe Harbor as determined by Mr. Davis in his Exhibit 421 were applied to the services described by him as "diverted from Baltimore's two-thirds of Safe Harbor."

Q. Were any changes made in Tables I, II, III, III-A, IV, V, V-B and V-C? A. No.

Q. Do you take the responsibility for the accuracy of any of the data, the descriptions, or the methods employed by Mr. Davis in his Exhibit 421 as applied to Exhibit 509? A. No.

Q. Will you describe briefly what is shown in Exhibit 509? A. On Schedule X there are shown certain additional data derived from Tables V and V-B of Exhibit 421; also, on Schedule X is the adjusted revenue from Baltimore which takes the place of Table VI-A of Exhibit 421. Schedule Y shows a corrected Table V-A and Schedule Z shows a corrected Table VI.

Q. Will you describe what is shown by Schedule X? A. On Schedule X there is first determined the cost of capacity and energy supplied by what Mr. Davis described as "diversion from Baltimore's two-thirds of Safe Harbor." Such costs shown are based upon the costs in Table

V of Exhibit 421. The [21018] computation is self-explanatory. The calculation results in unit costs applicable to the services described as "diverted from Baltimore's two-thirds of Safe Harbor" of \$14.27/kw and 0.867 mills/kwh. Schedule X also shows the determination of the division of what is described by Mr. Davis in his Table V-B as "supply by Baltimore" between backfeed and "diversion from Baltimore's 2/3 of Safe Harbor." This determination is based upon Table V-B of Exhibit 421. No alteration has been made in the basic data shown on such table. This calculation leads to the following result: Of the "total available supply for firm and interchange sales in Pennsylvania" 17.02 percent is supply by backfeed and 17.34 percent supply by "diversion from Baltimore's 2/3 of Safe Harbor."

At the bottom of Schedule X, there is also shown the adjustment of the revenue actually received from Baltimore Company. To provide a basis for comparison on Table VI and without agreement that it is a proper basis, the revenue from Baltimore is considered to be the revenue actually received from Baltimore plus the net interchange revenue received from the Pennsylvania customers. No adjustment, such as was shown in Table VI-A of Exhibit 421, has been made of Penn Water's division of the total revenue received from P. R. R.

Q. In your revision of Table V-B did you make any adjustment for the difference between actual conditions in the year 1946 and a year of average river flow conditions? [21019] A. No.

Q. What effect does a difference between actual conditions and conditions under a year of average river flow have on the assumptions and the data in Table V-B of Exhibit 421? A. With respect to any excess or deficiency in Holtwood generation approximately 70 percent of this amount would be reflected in changed deliveries at Highlandtown, shown on line 6 of Table V-B. It is not proper to assume that all of such excess or deficiency would



be reflected in an adjustment in the single item of back-feed. There would be an adjustment of about 5 percent of Holtwood's excess or deficiency in the amount of transmission losses on line 4 of Table V-B. There would be an adjustment of about 7 percent or 8 percent of the combined excess or deficiency at both Holtwood and Safe Harbor in the firm sales to M. E. Co. included in line 13 of Table V-B. With respect to any excess or deficiency at Safe Harbor there would be a change in line 2 of Table V-B equal to one-third of such excess or deficiency, and in lines 8, 10 and 14 of Table V-B of amounts that could only be determined by an hour to hour computation for the entire year.

Q. Why did you not attempt to adjust the figures on Table V-B for the difference between actual flow in the year 1946 and average river flow conditions? A. The proper amount of correction could only be determined by a long and detailed study of the hour by hour [21020] conditions, which we have not had an opportunity to make.

Q. Will you describe what is shown in Schedule Y of Exhibit 509? A. On Schedule Y certain data have been used which are the same as those shown on Table V-A of Exhibit 421. Principally these are the first nine lines of that table, which are being used for the purpose of this exhibit without change in the dependable capacity or allocation of losses and capacity among the several plants. Based on the amounts of "net dependable capacity available for load," shown in line 9, there is determined, in lines 10 to 13, the amount of "Holtwood resources of net dependable capacity" in a manner which parallels the computation in Table V-B of the "Holtwood resources" of energy. It is in the next line (line 14) of Schedule Y that the method that I have used departs from anything shown in Exhibit 421.

Q. How did you determine the amount of capacity delivered to Baltimore at Highlandtown as shown in line 14 of Schedule Y? A. That was determined by reference

to a diagram showing the relation of Holtwood generation, deliveries at Highlandtown, and system losses to the total PW and Safe Harbor hydro generation.

MR. MYSE: Mr. Examiner, I now hand the reporter a chart entitled "Relations of (1) Holtwood Hydro Generation, [21020-A] (2) 25 cycle Delivery to Highlandtown, and (3) P. W. & S. H. Transmission Losses and Station Uses to Total P. W. & S. H. Hydro Generation for the hours of System Peak Load (Area 6 & Pa. Cust) on All Days of 1945 and 1946 except Sat., Sun. and Hol. and Those Days on which Hydro Units (at Holt. or S. H.) were Out of Service for Maintenance," and ask that it be marked Exhibit 510 for Identification.

(The chart referred to was marked Exhibit No. 510 for Identification.)

By MR. MYSE:

Q. Will you describe Exhibit 510? A. There are plotted on this diagram certain data for the years 1945 and 1946, limited to the hours of daily peaks on the Area 6 plus Pennsylvania customers system, on all days except Saturdays, Sundays and holidays, days on which hydro units at either Holtwood or Safe Harbor are out of service for maintenance, and days on which the hydro generation on the peak hour was less than 200,000 kw. For all these daily peak hours there were recorded: (1) the Holtwood hydro generation, (2) the 25 cycle deliveries at Highlandtown, (3) the PW and Safe Harbor station uses and transmission losses.

These three items were plotted vertically against a horizontal scale showing the total hydro generation at Holtwood and Safe Harbor. Then on this plot straight lines were drawn through the data to represent the average relations [21021] shown by 1945 and 1946 experiences.

Q. How did you use the data shown on Exhibit 510 in determining the capacity delivered to Baltimore at High-

landtown, as shown on line 14 of Schedule Y? A. This diagram shows that for a total hydro generation of 250,000 kw which generation is equal to the total dependable hydro capacity as shown by Mr. Davis in Exhibit 421, that the average 25 cycle delivery at Highlandtown will be 53,000 kw. On any particular daily peak the delivery at Highlandtown may be more or less than 53,000 kw, just as the total hydro generation at that time may be more or less than 250,000 kw, but to the same extent that the entire system can count on 250,000 kw as dependable hydro capacity, Baltimore Company can count on the delivery at Highlandtown at the time of their peak of 53,000 kw.

Q. Will you state the significance of the data plotted in the upper part of Exhibit 510? A. The data on the upper part of this diagram, showing the relation between Holtwood hydro generation and the total hydro generation, were plotted as a check on the relation between the delivery at Highlandtown and the total hydro generation. The difference between Holtwood hydro generation and the delivery at Highlandtown appears to be about 37,000 kw, which difference is accounted for by (1) 60 cycle hydro generation—22 or 23 mw; (2) 25 cycle sendout to Lancaster—[21022] 5 or 6 mw; (3) station uses and loss on the 25 cycle circuits to Highlandtown—perhaps 7 or 8 mw. Finally, there may be a residual of 1 or 2 mw, accounted for by the relatively small use, on the average, of the Holtwood frequency changers.

Q. Will you state the significance of the data plotted in the lower part of Exhibit 510? A. The data at the bottom of this diagram, showing the relation between the Penn Water and Safe Harbor station uses and transmission losses and total hydro generation, show that on the average the losses are about 17,000 kw for a hydro generation of 250,000 kw. The scattering of points from which this average curve is drawn is to be expected. The losses are determined by the difference between a great many meter readings. Not all of these meters can be read exactly on

the hour and any small inaccuracies in these many meter readings causes a relatively large variation in the resulting difference, representing the system losses. It is possible to have recorded losses of as much as 25,000 kw or more, but such amounts are the results of meter reading inaccuracies and are not the actual losses being experienced on the system at that time.

Q. What part of the "Holtwood resources of net dependable capacity," shown in line 13 of Schedule Y, can be counted upon on the average to be delivered at Highlandtown? A. The 53,000 kw shown in line 14 as delivery to [21023] Highlandtown is about 35 percent of the "Holtwood resources" shown in line 13.

Q. What part of the "Holtwood resources of net dependable capacity" are available for use in Pennsylvania as shown by Schedule Y? A. After deducting the capacity delivered at Highlandtown, the balance available for use in Pennsylvania in meeting the demands of the Pennsylvania customers is 97,312 kw, or about 65 percent of the "Holtwood resources of net dependable capacity."

Q. Have you made any changes in the demands of the Pennsylvania customers as shown in Table V-A of Exhibit 421? A. Yes, there have been two changes made in these demands shown in Schedule Y as compared with Table V-A of Exhibit 421. The load for the Railroad used in Schedule Y is 47 per cent of the total actual Railroad load at the time of the system peak, instead of a portion of the total billing demand for the Railroad load in December. Also, in Schedule Y no reserve has been added to the demand of M. E. Co.

Q. Why did you use the actual demand of the Railroad instead of the billing demand for December as a basis for the figures in your Schedule Y? A. Because the actual demand of the P. R. R. is a component of the system peak load used in the purported determination of dependable hydro capacity. The deduction of the actual [21024] de-



mand of the P. R. R. from the available capacity is necessary to determine what capacity is left for other customers.

Q. Could a billing demand be substituted for an actual demand of the P. R. R. in the determination of the capacity available for other customers? A. Such substitution is not proper in my opinion. It could not be made without making necessary an adjustment in the purported dependable hydro-capacity.

Q. What adjustment would be necessary? A. Because there is no separate billing demand for the railroad load in Pennsylvania, the figure shown by Mr. Davis in line 14 of Table V-A is 48 percent of the total December billing demand, amounting to 76,333 kw. This December billing demand is 11,333 kw greater than the actual railroad load at the time of the system peak. If the billing demand were substituted for the actual railroad load at the time of the system peak, that system peak would be about 11,000 kw greater with no change in the average system load. The dependable capacity shown by Mr. Davis in line 3 of Table V-A would then have been increased by 11,000 kw provided he followed the same procedure of computation explained in connection with Exhibit 425.

Q. Why did you not apply any reserve to the load of M. E. Co.? A. Operations under the M. E. contract are distinctly [21025] different from those under the PL and PE contracts. PW has no obligation to provide reserve capacity (other than spinning reserve) for the M. E. system and M. E. Co. considers no reserve (other than spinning reserve) to be available as a result of their operations with the Penn Water-Safe Harbor system.

Q. Will you describe what Schedule Z of Exhibit 509 shows? A. Schedule Z shows revision of Table VI of Exhibit 421. The form of the schedule and table are somewhat similar but the following differences should be noted: In Schedule Z there has been inserted a line (4a) to show the subtotal of Pennsylvania customers and P. R. R. in Pennsylvania. There has also been inserted lines 5a, 5b

and 5c, to show separately the following: line 5a—service to Baltimore and cost relating thereto; line 5b—supply by Baltimore and credits assumed in connection therewith; line 5c—net services and cost to Baltimore. The data shown in the ten columns are generally of the same character in Schedule Z and Table VI except in column 6.

The notes on Schedule Z show all the computations of data that cannot be obtained from other schedules of Exhibit 509 or on tables of Exhibit 421.

Q. Where did you obtain the costs of energy and capacity shown as "diverted from Baltimore's 2/3 of Safe Harbor" in notes (a) and (b) of Schedule Z? [21026]

A. Those costs were determined on Schedule X.

Q. Why did you not make any change in the 4.7 mill rate applied to backfeed in Schedule Z? A. With the time available it has not been possible to complete the detailed computations necessary for the determination of the actual cost to Baltimore of backfeed from Baltimore and Washington.

Q. If you had carried out all the appropriate corrections made or suggested in Exhibit 351 in relation to Exhibit 421, would there have been any effect on the amounts shown in Exhibit 509 as the excess of revenues over allocated costs to Baltimore? A. Those amounts shown in line 5c, columns 9 and 10 of Schedule Z would have been further substantially reduced.

Q. What would be the effect if you had made corrections similar to those made in Exhibit 509 in relation to Exhibit 422? A. The amount and percentage shown, respectively, in line 5, columns 8 and 9 of Exhibit 422 would have been substantially reduced.

Q. Exhibit 482 shows that an adjustment was made to Exhibit 421 for an excess of generation in the year 1946 as compared with average river flow conditions, based upon the years 1917 to 1941, inclusive. Does Baltimore Company now compute the generation at Holtwood and Safe Harbor under [21027] average river flow conditions based upon the

years 1917 to 1941, inclusive? A. No, it does not. Neither Penn Water nor Baltimore Company now uses an average based upon such 25-year period. Both companies use, for all purposes connected with their expectations of average hydro generation, an average based on the 30 years from 1917 to 1946, inclusive. This longer record gives a more reliable indication of expected future conditions.

Q. Is there available any computation by Baltimore Company of the average generation based upon this 30-year period? A. Yes.

MR. MYSE: Mr. Examiner, I now hand the reporter a memorandum from R. L. Ashley to F. A. Leslie dated January 6, 1947, the subject of which is "Revised Basis for Average Flow Hydro Generation," and ask that it be marked Exhibit 511 for Identification.

TRIAL EXAMINER: The Memorandum handed to the reporter may be marked Exhibit 511 for Identification.

(The document referred to was marked Exhibit No. 511 for Identification.)

By MR. MYSE:

Q. What does Exhibit 511 show? A. It shows that Baltimore Company now uses a 30-year average flow record and expects that the average gross hydro generation should be approximately 1,525,000,000 kw. per year.

[21028] Q. As compared with the actual gross hydro generation in 1946 was there a deficiency or an excess based upon Baltimore Company's expectation of generation under average river flow conditions? A. There was a deficiency of about 20,000,000 kwh in contrast with the excess of approximately 30,000,000 used in Exhibit 482.

[21029] MR. MYSE: Mr. Examiner, may the record show that I now distribute additional copies, in addition to those which were distributed the other day, of Exhibits 510 and 511?

TRIAL EXAMINER: Any further questions of the witness on direct?

MR. MYSE: Not at this time, Mr. Examiner.

TRIAL EXAMINER: Any cross-examination of the witness by Staff counsel?

MR. GOLDBERG: Does this complete the witness' direct testimony, Mr. Examiner?

MR. MYSE: No, sir, this is all we have ready at this time of this witness. We feel we have not had an adequate or sufficient opportunity to complete our research and prepare sur-rebuttal by the witness Loane.

TRIAL EXAMINER: The Examiner rules that the witness should pass for cross-examination.

MR. MYSE: We take exception to that ruling for the reasons stated yesterday or day before yesterday in connection with the same ruling in respect to the testimony of the witness Spaulding.

TRIAL EXAMINER: The Examiner rules that the Respondents have had an adequate time to prepare for their sur-rebuttal. You may cross-examine.

[21039] CROSS-EXAMINATION.

By MR. GOLDBERG:

[21040] Q. Now, will you tell us why, in your opinion, you believe that there should be deducted from the Holtwood resources the capacity delivered at Highlandtown in Table V-A of Exhibit 421? A. To make it consistent with V-B.

Q. Is it merely to make it consistent, or is there a reason in your mind why there should be this consistency? That is really what I am getting at. A. Certainly I think there should be a consistency between the two. Energy goes to Highlandtown, and so does the capacity, and are both used by Baltimore.



[21043] Q. Do you consider the capacity delivered at Highlandtown as dependable capacity? A. The 53,000 kw which I deducted in my exhibit, being delivered at Highlandtown, is dependable in the same extent and same degree that the 250,000 kw capacity is dependable that Mr. Davis used in Exhibit 421.

Q. Then you are saying that you have considered 53,000 kw as dependable capacity in asserting that there should be consistency between the energy accounting in Table V-B and the capacity accounting in Table V-A of Exhibit 421. Is that right? A. Yes, with this explanation: That 53,000 may not be all that I think is dependable and is delivered at Highlandtown.

Q. Now, then, let us assume for the sake of this question that the 53,000 kw is not dependable capacity. Under that assumption, would you still say that there is inconsistency between Tables V-B and V-A of Exhibit 421? A. I just cannot make that assumption, because I know it is contrary to the facts.

Q. Well, the fact that you answer on the basis of that assumption doesn't mean that you are agreeing with the assumption, Mr. Loane. But I would like to have an answer from you taking my assumptions for the sake of the question. A. I haven't considered it, and I don't know what my [21044] answer would be.

Q. Well, can you consider it now and tell me what your answer is?

THE WITNESS: There are so many other things that would have to change, Mr. Goldberg. In Exhibit 421, according to Mr. Davis there is only 27,000 of undependable Holtwood hydro capacity. I cannot conceive of 53,000 undependable capacity being delivered at Highlandtown.

By MR. GOLDBERG:

Q. You say, then, that you cannot give it that consideration you feel you would have to give it at this time in

answering my question? A. You would have to change a lot of other conditions.

Q. Do I correctly understand, then, that you say that you cannot give me an answer because you would not have on the witness stand sufficient time to consider all the [21045] ramifications that you say are involved. Is that right? A. O. K., that is right; I couldn't consider everything.

Q. Now, in saying that you have made the energy accounting and the capacity accounting in Exhibit 421 consistent, have you in any way departed from the theories and the principles employed by Mr. Davis?

THE WITNESS: I don't know, Mr. Goldberg.

[21059] Q. Isn't it a fact that when Baltimore's two-thirds of Safe Harbor's energy is diverted to the Pennsylvania customers, Baltimore Company is required to replace that diverted energy to meet its own requirements by generating steam electric energy?

MR. MYSE: Now, Mr. Examiner, I object to that. There is an assumption in there that there is some diversion in Baltimore's two-thirds, which is an assumption this witness has not made, and there is no foundation in the direct testimony of this witness for that question, and I therefore object to it as not within the scope of the direct, and immaterial and irrelevant.

MR. GOLDBERG: That I cannot fathom, Mr. Examiner, because all you have to do is glance at Exhibit 509, and it is inherent in the exhibit. He treats with the diversion.

MR. MYSE: I think if you glance at the exhibit you will see that in every place "diversion from Baltimore" is quoted, and it means as Mr. Davis used it.

Now, this witness hasn't taken any responsibility for it.

. . .

[21060] TRIAL EXAMINER: As the Examiner sees it the question goes to the matter of the witness applying certain costs to the so-called diverted energy. The question is therefore deemed to be proper.

THE WITNESS: Let me say it this way: When more Safe Harbor energy is used in Pennsylvania and less is sent to Baltimore, Baltimore has to generate more by steam.

By MR. GOLDBERG:

Q. Isn't it also a fact that such additional generation by steam costs Baltimore considerably more than the energy which is generated at Safe Harbor and diverted to Pennsylvania [21061] customers? A. Very likely.

Q. It is more than very likely, isn't it? It is a fact, isn't that so?

. . .

THE WITNESS: The cost of steam generation in Baltimore is more than the 0.867 mills I used in Safe Harbor.

By MR. GOLDBERG:

Q. Is it fair to say it is considerably more? A. Yes.

Q. Now, then, in Exhibit 509 the credit to Baltimore Company is in an amount less than the costs incurred by Baltimore Company in generating the energy by steam, isn't that so? A. That is right.

. . .

[21062] By MR. GOLDBERG:

Q. Well, in view of the fact that the credit is in an amount less than the cost to Baltimore generating the additional steam energy, doesn't it mean that the Pennsylvania customers receive the benefit of low cost hydro energy at the expense of Baltimore Company?

[21063] MR. MYSE: I object to that question as being argumentative.

TRIAL EXAMINER: It is very close to the line but the Examiner will permit the question.

THE WITNESS: The Pennsylvania customers are charged with the cost of the energy from Safe Harbor. Baltimore Company's credit is the cost which it would have paid for the Safe Harbor energy if it received it, not the value of that energy to Baltimore.

By MR. GOLDBERG:

Q. Isn't the answer to my question yes? A. I don't know what you mean by the expense of Baltimore.

Q. That means you don't understand my question and therefore cannot answer it? A. No, I answered it, I think.

Q. I am trying to understand what you mean when you say that you don't know what I mean by the use of the word "expense." Does that mean you don't understand my question and therefore cannot answer it? A. What two conditions are you comparing? If there is a disadvantage to Baltimore you have to compare two things.

Q. I am giving you the comparison. The credit to Baltimore Company as against the cost Baltimore Company has to incur in generating the additional steam.

[21064] MR. MYSE: Mr. Examiner, I think the colloquy that has just taken place shows exactly what I said a moment ago that the entire line of questioning is argumentative.

TRIAL EXAMINER: I think so.

Q. Mr. Loane, comparing the credit to Baltimore and the cost Baltimore incurs in generating the additional steam, the treatment in Exhibit 509 results in a disadvantage to Baltimore, right?

MR. MYSE: Same objection.

THE WITNESS: That is what I said initially, that if Exhibit 509 is compared with 421 there is more cost to



[21065] Baltimore, if that is what you mean by the expense to Baltimore.

Q. Doesn't the treatment in Exhibit 509 mean that the costs of energy to the Pennsylvania customers do not properly reflect the cost of steam generation on the interconnected system?

[21066] THE WITNESS: I don't want to say what they do not reflect. They do reflect the costs incurred in serving the Pennsylvania customers under the assumptions made herein.

By MR. GOLDBERG:

Q. Under the assumptions made in Exhibit 509—

A. And 421.

Q. —the costs of energy to the Pennsylvania customers do not properly reflect the cost of steam generation on the interconnected system, isn't that so? A. I won't say what they do not reflect, I will tell you what they do reflect.

Q. Do you mean you would rather not answer that question?

TRIAL EXAMINER: No, the witness is having difficulty, I think, with your insertion of the word "properly."

By MR. GOLDBERG:

Q. Well, shall we say do not reflect the costs of steam generation on the interconnected system, leaving aside for the moment whether it is proper, or not? A. That is right, they do not reflect the costs of steam generated energy on the interconnected system.

[21080] Q. Will you agree that a company selling power and energy on a firm basis requires reserve generating capacity? A. Generally, yes, but there may be exceptions.

Q. Will you agree that all the firm customers should be

required to bear the cost of such reserve generating capacity?

[21081] THE WITNESS: If the customer is provided with reserve he should pay the cost of it.

By MR. GOLDBERG:

Q. Isn't Metropolitan Edison that kind of firm customer? A. No.

[21082] Q. You say it is not? A. It is not.

Q. Isn't it a fact that it is that type of a firm customer in so far as it affects Penn Water's obligations to supply Metropolitan Edison Company's requirements above the steam line? A. No, I don't think it is.

Q. The requirements above the steam line you do not think are a firm obligation? A. There have been several definitions of firm supply and maybe according to the FPC definition the supply to M. E. Company would not be firm, but what is firm is defined in the M. E. contract.

Q. Isn't this the fact, that with respect to M. E.'s requirements above the steam line they are no different from P. P. & L.'s requirements under its contract with Holtwood? A. They are different.

Q. In what way are they different?

MR. MYSE: I object to that, Mr. Examiner. That is the point at which we launch off into a long investigation as to what Exhibit 72 shows. We have gone over that several times.

TRIAL EXAMINER: I think the form of the question is bad.

THE WITNESS: Maybe I can explain the difference relatively easy. P. P. & L. and P. E. Company in their reports [21083] of various kinds show as the capacity available from P. W. an actual demand plus a reserve. P. W. has to provide the reserve related to the Coatesville and Lancaster load; M. E. Company shows as available from P. W.

only the demand, they supply the reserve, that is the difference.

. . .

Q. I am just interested in finding out if you can identify for us, for me at least, these reports. A. The reports that I referred to are capacity reports which we receive from the Pennsylvania-New Jersey Interconnection in connection with our coordinated operation with them. Now I understand that M. E. will follow the same thing in their FPC Form 12 report, but it is not available yet.

Q. You say you understand M. E. will do that in their FPC Form 12 report which has not been filed yet? A. I asked for it last week and it was not available upstairs.

Q. Was that the first report that will reflect operations under Exhibit 72? A. That is right.

Q. How did you ascertain that M. E. is going to do that? A. I asked Mr. Von Eiff, who is a member of the [21084] Operating Committee under that contract, to find out for me, and I believe he and Mr. Watchorn contact someone in the M. E. Company.

MR. MYSE: I don't think it is quite clear as to what you meant when you said that M. E. was going to do something in its Form 12. Can you be a little clear on that?

THE WITNESS: M. E. Company will show in their Form 12 the capacity available from P. W. as an actual demand without any addition of reserve, whereas in former years when we supplied York-Edison they showed the demand plus the reserve as being available from P. W.

. . .

By MR. GOLDBERG:

Q. And you take that to mean that Penn Water provides no reserve for M. E., is that right? A. That is right.

Q. Have you yourself attempted to verify your conclusion that Penn Water does not supply any reserve to M. E.

under Exhibit 72 by making any reference to the terms of the contract? A. Oh, I know they supply a spinning reserve.

Q. Well, other than that, have you referred to the contract to verify your understanding? A. No, it is just the understanding of what the operations will be.

[21085] Q. What detailed computations would be necessary to determine actual cost to Baltimore of the backfeed from Baltimore and Washington? A. Well, you would have to set up the hour-to-hour schedule of what the backfeed is, some of it being for interchange and some of it being used in connection with the firm supply in Pennsylvania. Then the costs that relate to the interchange have already been determined as the basis of the interchange billing. It is the highest cost part of the backfeed that is related to the interchange, and it would be necessary hour-by-hour to determine the costs that relate to the backfeed or the part of the backfeed used in connection with firm supplies.

Q. When you say that the higher costs have already been determined as related to interchange, to what period of time do you have reference? When was this determination made? A. Whether it was the hour following, the day following or the week following, I don't know, but the interchange figure is determined currently.

Q. Oh, it is always ready as the operations of the company move along? A. Well, you have got to make out a bill for the interchange.

Q. I see. Now, what would you have to do to determine the costs of the firm? A. The costs of what?

[21086] Q. Of the firm portion. A. You mean the backfeed that is used to supplement Holtwood's and Safe Harbor's supply?

Q. Yes. A. Well, ordinarily we go to the Gas Company and ask them to cooperate in such a study, but I don't think we could under these circumstances.

Q. You haven't done that? A. We are proceeding without their cooperation.



Q. Now, is that determined as rapidly as the interchange costs are determined? A. Oh, no, there is no current determination of that.

Q. But you say such a determination is presently in process? A. We started it in connection with this rebuttal testimony.

Q. When did you start?

[21087] THE WITNESS: Sometime last week. I couldn't be sure of the date.

By MR. GOLDBERG:

Q. What records have to be examined to ascertain the costs in connection with the firm portion? A. Well, a good many of the hourly load records will be necessary, the generation and deliveries at various places, and we have got to get the data which relates to the costs of generation at various places.

Q. I take it it has to be an hour-by-hour study. Is that right? [21088] A. For the most part, yes. Perhaps there will be times where you can group hours together and work out the costs for a group of hours.

Q. I understand your testimony to be that you have to determine what portion is for interchange and what portion is for firm. Right? A. Well, since the backfeed that is used for interchange has already been paid for, I wouldn't think that any costs relating to that use of backfeed would be charged to the backfeed used in connection with the firm supplies.

Q. Well, how do you determine what portion is for interchange and what portion is for firm? A. Well, the highest cost part has already been billed as interchange.

Q. That is the determination that the highest cost is for interchange?

TRIAL EXAMINER: I think the cross-examination is beginning to become highly general and not particularly relevant.

By Mr. GOLDBERG:

Q. How close to completing the study are you? A. I don't know. It is being done in Baltimore, and I am only in telephone communication with it.

[21216] TRIAL EXAMINER: Is there any further testimony to be offered by Respondents' counsel in sur-rebuttal?

Mr. MYSE: Mr. Examiner, this is all the sur-rebuttal testimony we have been able to prepare for presentation in the wholly inadequate and unreasonable time we have been allowed for such preparation.

\*We want to make it clear, however, that this is not all of the evidence we would produce if we were to be accorded a reasonable opportunity to rebut the evidence presented against us in this proceeding by the Staff and the Intervenor.

We object strenuously to the summary nature of the action of the Commission, as represented by the Examiner, which thus deprives us of an adequate opportunity for hearing on such evidence presented by other parties to this proceeding.

The volume, detail and technical nature of the evidence recently presented by the other parties, combined with the almost continuous hearing sessions since September, 1946; the requirement of immediate cross-examination of hostile witnesses; the requirement of immediate re-direct examination of our own witnesses; the requirement—

TRIAL EXAMINER: Now, just a minute. All of this is a statement of the same character that the Examiner has listened to on every single occasion when the Examiner has directed Respondents' counsel, as he has directed every other counsel appearing in this case, to proceed with the [21217] examination of the witness that is then in order. I see no reason for counsel again going through all of this recitation.

MR. MYSE: Well, I would like to summarize, if I may, the reasons why we think we are being deprived of a fair hearing under the Constitution and the laws of the United States, and in addition I have an offer of proof at the end of the summary.

TRIAL EXAMINER: You may hand your summary to the reporter.

MR. MYSE: I do not have it in condition where I could hand it to the reporter. I have notes, but I have corrections to those notes which I would like to consider as I go along in making my statement.

TRIAL EXAMINER: In view of the fact that Respondents' counsel has had an opportunity every time that he has been called upon to state his objection, if he had any, to going forward at that time when called, and to state the grounds supporting that objection, and that the Examiner permitted a complete statement of counsel's position and the grounds in support of that position in connection with the ruling on Respondents' counsel's application for a recess in February to prepare for rebuttal testimony, and for a recess in June in order to prepare for the sur-rebuttal testimony, I see no reason for the Examiner to be compelled to listen to a re-statement of all of those objections and the grounds supporting [21218] them, or any resume thereof.

Now, if Respondents' counsel is not prepared to go forward at this time with further sur-rebuttal testimony, and there is any condition of emergency attending his inability to proceed at this time, he may state that.

MR. MYSE: Mr. Examiner, we except to your ruling denying us the right to state our objections to the procedure adopted by the Commission, as represented by the Examiner, and state that we have not had an opportunity to fully state those objections.

I do at this time, however, desire to make an offer of proof, and although we have not completed our research and consideration in determining all of the rebuttal evi-

dence we would present if given an adequate and reasonable opportunity, we are able to state and hereby offer to prove—

TRIAL EXAMINER: Wait just a minute. What is the nature of this offer of proof?

MR. MYSE: I am just going to get to it.

TRIAL EXAMINER: I don't mean that. I think it is improper for counsel to make an offer of proof with respect to testimony which he states he has not had time to prepare. Now, if he has any testimony to present, an offer of proof is unnecessary. He may call his next witness.

MR. MYSE: I would like to state for the record, Mr. Examiner, that we do have in the process of preparation certain [21219] detailed testimony, and I would like to state just exactly what that is in order that the Examiner may know the nature of the testimony in further rebuttal that we intend to produce, and it is as follows: By the witnesses Spaulding and Loane—

TRIAL EXAMINER: Wait just a minute. If it is unprepared testimony, it is not properly the subject of an offer of proof. If it is prepared testimony, counsel may call his next witness.

MR. MYSE: Mr. Examiner, we want to have the record show just exactly and in detail the type of evidence which we are prepared to bring in if given an adequate opportunity, and it relates to testimony and evidence in direct rebuttal and refutation of many of the documents and evidence presented by Commission's Staff and by the other Intervenor in this case, and it is in the course of preparation. I think we should have an opportunity to state for the record just exactly the detail that we intend to come in with if given an opportunity.

TRIAL EXAMINER: I see no reason for counsel's being permitted to make any such statement at this time. If